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CANADIAN COAST GUARD

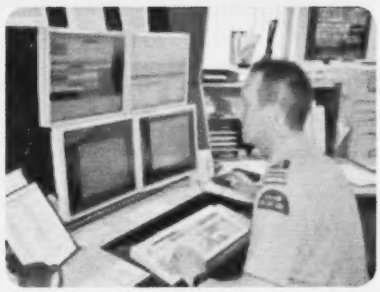
INTEGRATED BUSINESS AND HUMAN RESOURCES PLAN

2012-2015

1962 - 2012

50

An honoured past, a committed future



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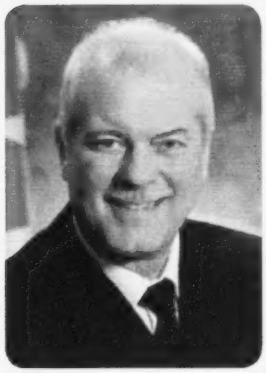
COMMISSIONER'S MESSAGE



For the past 50 years, the Canadian Coast Guard (CCG) has been a symbol of service and safety. *"An honoured past, a committed future"* is the slogan of our Golden Jubilee. This is a time to celebrate our successes and to be proud of our past accomplishments, but also to acknowledge that we have a long and exciting future ahead of us.

This year, as we celebrate our 50th Anniversary, we have been participating in a series of events across the country to honour our contributions to Canada as a maritime nation. As we celebrate our past, we are also very much focussing on the future and contemplating how we can improve as an organization. Greater demands for our services, a changing climate in the Arctic, advancements in technology and expectations for a greater presence in the North have set the tone for what we must strive to become. This has been a particular challenge in a time of financial restraint.

To overcome these challenges and achieve both our short and long term goals, we must continue to place a special focus on our greatest asset; our people. We need to ensure that we continue to have the right people, in the right place, at the right time, all while making the CCG an employer of choice for those entering the workforce.

I am very pleased to present the Canadian Coast Guard's first *Integrated Business and Human Resources Plan* which is a consolidation of the Agency's Strategic Human Resources Plan and Business Plan into one document. The document presents information as of April 1st, 2012, and therefore does not include any of the deficit reduction decisions which were announced in Budget 2012. The decisions which will affect Coast Guard, however, are summarized in an annex on the Economic Action Plan, on page 125.

The Integrated Business and Human Resources Plan focuses on strategic and management priorities that go to the heart of our ability to serve Canadians. The strategic priorities are *Renewing Assets (Fleet and Shore-based); Delivering Client-focused Services (Arctic Marine Corridor and e-navigation); Strengthening our Environmental Response Program; and Reinforcing our Contribution to Canada's Maritime Security.* We will also focus on the following management priorities: *Adapting to the New Fiscal Realities, Enhancing Business Management Practices;* and *Workforce Management.* Furthermore, an additional priority will be introduced starting in 2012 to address our transformation initiatives and the need to renew our service delivery and associated mechanisms in response to the 2012 Economic Action Plan decisions.

This three-year plan is a vital component of Coast Guard's overall strategic vision and a template which shows how CCG will invest in its workforce to maximize service delivery, while supporting the priorities of the Government of Canada, the Department of Fisheries and Oceans and the CCG.

The year 2011-2012 was challenging for the CCG. While implementing the Strategic Review decisions from Budget 2011, CCG was also engaged in reviewing program spending as part of the Government of Canada deficit reduction initiative. The changes that will flow from Budget 2012 will allow the Coast Guard to continue its transformation towards a more modern, streamlined and efficient service organization. Ultimately, as the restructuring of the CCG organization begins, we will continue to deliver the high level of excellence Canadians expect and to be well-positioned to meet all future challenges.

I am proud of Coast Guard employees, both full-time and volunteer, who continue to display their skills, professionalism and dedication on a 24/7 basis every day of the year. This is our foremost strength and has enabled the Coast Guard to make significant progress in realizing its commitments during the past year. These include: advancement of Fleet's renewal plan, vessel procurement progress, improved asset maintenance practices, an Environmental Response Integrated Management Plan, development of options for Coast Guard's role in maritime security and leadership in the development and implementation of e-navigation.

As CCG continues to work on its strategic and management priorities, the Agency will strive to ensure that it has sustainable on-water and shore-based operational capabilities. Budget 2012 confirmed that CCG will receive $5.2 billion over the next 11 years to renew the Canadian Coast Guard's fleet of vessels and helicopters. Renewing our fleet will help ensure that we continue our tradition of service excellence.

Fifty years of service, dedication and competence while evolving into a proud national institution is cause for celebration. Equally so, Coast Guard's future is bright as it builds on this foundation of 50 years of excellence. As CCG continues to work to ensure Canada's waters are safe and secure, helps to facilitate maritime commerce and contributes to sustainable aquatic ecosystems, I have every confidence that we will celebrate its century mark in the same glowing terms.

Marc Grégoire

Marc Grégoire
Commissioner, Canadian Coast Guard

INTRODUCTION

This year the Canadian Coast Guard (CCG) has consolidated its Strategic Human Resources Plan and its Business Plan into one document. The Integrated Business and Human Resources Plan is a comprehensive document which sets out, in one place, Coast Guard priorities and operational activities. It is an expanded version of the CCG material in the Report on Plans and Priorities for Fisheries and Oceans Canada (DFO) that is tabled in Parliament every year.

The Integrated Business and Human Resources Plan covers a three-year period and is updated annually. A number of the initiatives and commitments described in this Plan are responses to reviews and reports. For this reason, we have used acronyms to highlight the commitments related to the 2007 Report of the Auditor General (AG), and the 2010 Commissioner of the Environment and Sustainable Development (CESD) audit.

The Business Plan is divided into six sections:

1. "Who We Are and What We Do" sets out our mandate, our clients, the way we are structured and managed, the general results we seek to achieve, and the way our activities link to the work of other government departments;
2. "Where We Are Now" summarizes our operating environment, with the associated impacts and risks;
3. "Priorities" sets out our strategic and management priorities;
4. "Regional Perspective" describes region-specific activities;
5. "What We Do Every Day" describes our operational activities and ongoing services; and,
6. "Financial Information" sets out how we have allocated the funding provided by Parliament.

VISION
Through innovation and excellence, a recognized leader in maritime services and safety.

MISSION
Canadian Coast Guard services support government priorities and economic prosperity and contribute to the safety, accessibility and security of Canadian waters.

ORGANIZATIONAL VALUES
- Teamwork
- Professionalism
- Integrity
- Quality service
- Innovation

In addition, there are a number of annexes, including ones that provide information on our capital expenditures, research and development investments and the way we are responding to recommendations from the Auditor General's Status Report (2007).

There are two progress reports on Business and Human Resources Plan commitments each year: one at mid-year and one at the end of the fiscal year. These progress reports are publicly available and are posted on the Coast Guard website.

Other information about CCG activities can be found in the Integrated Investment Plan, and the Fleet Annual Report. These reports are also available, along with the Integrated Business and Human Resources Plan, on the Coast Guard website http://www.ccg-gcc.gc.ca/eng/CCG/Publications

As CCG continues to work on its strategic and management priorities, the Agency will strive to ensure that it has sustainable on-water and shore-based operational capabilities. Budget 2012 confirmed that CCG will receive $5.2 billion over the next 11 years to renew the Canadian Coast Guard's fleet of vessels and helicopters. Renewing our fleet will help ensure that we continue our tradition of service excellence.

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CANADIAN COAST GUARD HISTORY

The first lifeboat and lighthouses in Canada were established on the east coast during the 1700s. In response to an urgent need for protection and regulation of fishing and shipping, patrol vessels appeared along the eastern seaboard and in the Great Lakes region during the 1800s.

At Confederation in 1867, the federal government assumed responsibility for marine affairs including the operation of government vessels (naval services) and for various elements of marine infrastructure, including:

- Aids to navigation;
- Lifesaving stations;
- Canals and waterways;
- Marine regulatory bodies; and
- Supporting shore infrastructure.

The Department of Marine and Fisheries was established in 1868 to discharge the federal marine mandate. In 1910, the Naval Service of Canada, precursor to the Canadian Navy, was established from a portion of the departmental fleet. Marine and Fisheries became two separate departments in 1930 and, in 1936, responsibility for marine transportation shifted to the new Department of Transport (DOT).

The DOT maintained a fleet of 241 vessels that has subsequently evolved into the CCG fleet. This fleet had a number of missions that now fall within Coast Guard's mandate, including the supply and maintenance of aids to navigation, icebreaking, and maritime search and rescue.

Starting in the 1940s, many organizations and communities pressed the government to form a national coast guard. The Canadian Coast Guard was officially created on January 26, 1962. The establishment of the Canadian Coast Guard College followed in 1965 in Cape Breton, Nova Scotia, to train men and women for service in CCG.

The federal government has restructured Coast Guard twice since 1962:

- With the 1995 merger of CCG into the Department of Fisheries and Oceans (DFO), DFO Science vessels and the Fisheries Conservation and Protection fleet were incorporated into a single Coast Guard fleet. The merger facilitated a more efficient multi-tasking of vessels allowing a reduction in the size of the newly combined fleet.

- In 2005, CCG was granted Special Operating Agency (SOA) status within DFO which affirmed the Canadian Coast Guard as a national institution and emphasized its essential role in providing maritime services required by users of Canadian waterways. It also confirmed Coast Guard as the operator of the government's civilian fleet in support of programs within DFO and in other government departments.

On January 26th, 2012, CCG celebrated its Golden Jubilee – 50 years of service to Canadians. Throughout the year CCG will participate in commemorative events and activities across the country to build and strengthen Canadians' awareness of who we are and what we do, and to honour the men and women of the Canadian Coast Guard, past and present.

WHO WE ARE AND WHAT WE DO

ON AN AVERAGE DAY, CCG:

- Saves 13 lives;
- Assists 58 people in 25 search and rescue cases;
- Services 55 aids to navigation;
- Handles 1,547 marine radio calls;
- Manages 2,135 ferries, tugs and commercial ship movements;
- Escorts 4 commercial ships through ice during the ice season;
- Carries out 11 fisheries patrols;
- Supports 3 hydrographic missions;
- Supports 8 scientific surveys;
- Deals with 3 reported pollution events; and
- Surveys 5 kilometres of navigation channel bottom.

The Canadian Coast Guard has a direct and important impact on the lives of Canadians. We help ensure the safe use of Canadian waterways, and we facilitate the smooth functioning of the Canadian economy.

A nationally recognized symbol of safety, Coast Guard serves on three oceans, the St. Lawrence River and Great Lakes, and other major waterways. Often CCG is the only federal presence in many remote, Aboriginal, and Arctic communities. Operating along the longest coastline in the world and in some of its most difficult weather conditions, CCG operates 24 hours a day, every day of the year (for information on what we do every day, please refer to Section 5 on page 62).

Legal Mandate

Coast Guard's mandate derives from the *Constitution Act, 1867,* which assigned exclusive legislative authority over navigation, shipping, beacons, buoys, lighthouses, and Sable Island[1] to the Government of Canada.

The *Oceans Act* gives the Minister of Fisheries and Oceans responsibility for services for the safe, economical, and efficient movement of ships in Canadian waters through the provision of aids to navigation, marine communications and traffic management services, icebreaking and ice management services, and channel maintenance.

The *Oceans Act* also gives the Minister responsibility for the marine component of the federal search and rescue program, marine pollution response, and support to other government departments, boards, and agencies through the provision of ships, aircraft, and other services. The *Canada Shipping Act, 2001* gives the Minister of Fisheries and Oceans responsibilities, powers, and obligations with respect to aids to navigation, search and rescue, pollution response, and vessel traffic services.

Under the *Arctic Waters Pollution Prevention Act* (AWPPA), a Ministerial Order may be signed for and issued on behalf of the Governor-in-Council by the Minister of Transport, to provide support and visible written authority for actions taken on their behalf by a designated

[1] As of April 1, 2012, responsibility for Sable Island has been transferred to the Parks Canada Agency.

On-scene Commander of an Arctic spill incident. Subject to regulations under AWPPA and to applicable inter-agency agreements, the Canadian Coast Guard has lead federal response-agency responsibility for ensuring responses for all ship-source spills and mystery-source pollution spills in waters under Canadian jurisdiction that may occur, for example, as a result of loading or unloading to or from ships or oil-handling facilities.

Who We Serve and What We Do

Operating as Canada's only national civilian fleet, we provide a wide variety of programs and services to Canadians on four equally important levels: delivering CCG's own programs; supporting Fisheries and Oceans Canada (DFO) programs; supporting other government departments; and supporting government decisions, priorities and the broader federal agenda.

CCG plays a critical role in the lives of Canadians by operating along the single longest coastline in the world, including the Great Lakes, the St. Lawrence, and the Mackenzie River. We provide services to commercial shippers, ferry operators, fishers, recreational boaters, ports, coastal communities, other federal government departments and the general public. For example:

- We are mission-ready 24 hours a day, 7 days a week and operate in almost all conditions. When extreme weather hits and other vessels are being called into port, Coast Guard vessels are often asked to head out to sea to save lives, to break ice to free trapped vessels, or to provide whatever assistance is needed to enable safe passage;
- We are a visible symbol of federal presence and provide the capacity to assert Canadian sovereignty, especially in the Arctic;
- We support on water safety and security by responding to mariners in distress, disasters and emergencies with one of the most effective maritime search and rescue systems in the world, supported by the air assets of the Canadian Forces and the volunteers of the Canadian Coast Guard Auxiliary;
- We contribute to Canada's overall economic prosperity by providing essential support for our country's $190 billion global and domestic marine trade industry[2]. For instance, we maintain and service fixed and floating aids to navigation that mark safe passages through our waterways. We also provide essential icebreaking services that enable ships to move safely and efficiently through ice-covered waters in Eastern Canada and the Great Lakes throughout the winter, and in the Arctic during much of the Northern navigable season. Icebreaking services keep most Canadian ports, especially Montreal, open for business year-round, prevent flooding along the St. Lawrence River, and support ferry operators, fishers, and coastal communities;
- We are the lead federal agency for ensuring responses to all ship-source and mystery-source spills in waters over which Canada has jurisdiction, with enhanced responsibilities in the Arctic;
- We support science activities by providing platforms for scientists from DFO and other federal government departments such as Environment Canada, Natural Resources Canada and the Natural Sciences and

[2] Source: Transport Canada 2010 Report, Committed to Marine Safety, Security, Trade and the Environment

Engineering Research Council of Canada. We facilitate important scientific activities and research such as science surveys essential for determining biomass and stock assessments leading to fisheries allocations; charting to enable safe navigation; freshwater research in the Great Lakes; seabed mapping to help establish Canada's claims under the United Nations Convention on the Law of the Sea; and research to assess the changing ocean conditions and the impacts of climate change;

- We support the security and enforcement activities of DFO with vessels dedicated primarily to fisheries enforcement to ensure an orderly and sustainable fishery that complies with fisheries regulations. We also support the maritime security activities of the Royal Canadian Mounted Police (RCMP) by participating in a joint program on the Great Lakes and St. Lawrence, as well as maritime security activities of the Department of National Defence, the Canada Border Services Agency, and Public Safety Canada; and,
- We support the non-military activities of other Canadian government departments including those of the Department of Foreign Affairs and International Trade, Health Canada, and Transport Canada.

How We Are Structured and Managed

The Canadian Coast Guard is a national agency with its headquarters in Ottawa (the National Capital Region) and five regional offices (Newfoundland and Labrador, Maritimes, Quebec, Central and Arctic, and Pacific). CCG is a highly decentralized organization, and the vast majority of its employees are located outside the National Capital Region.

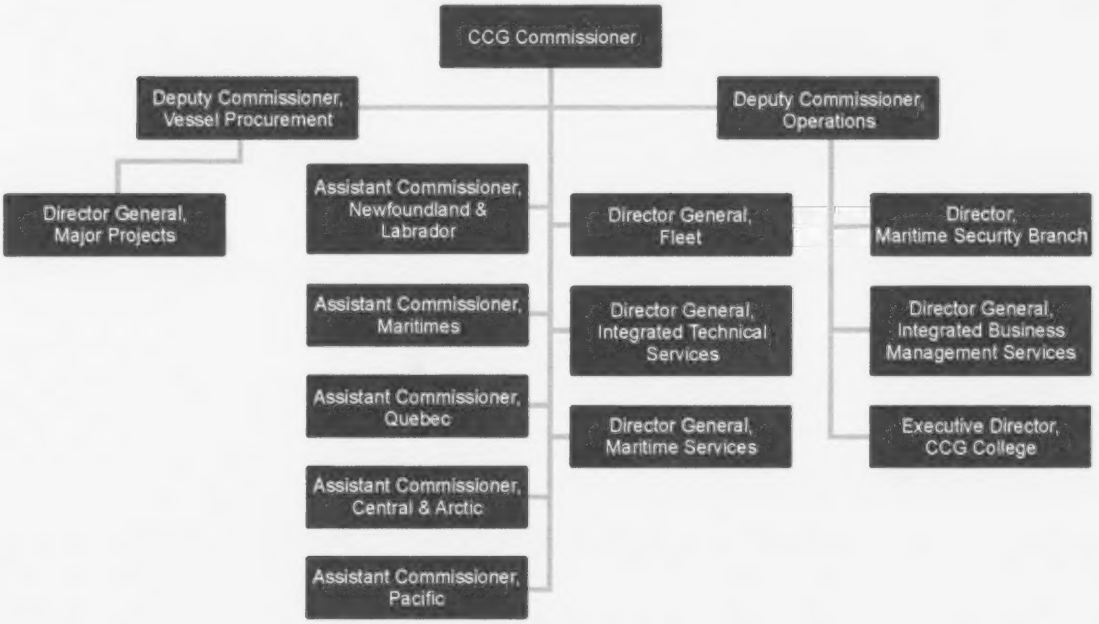
The Commissioner is the Chief Executive Officer of the Agency, reporting and accountable to the Deputy Minister of Fisheries and Oceans Canada for the performance of the Coast Guard. The Commissioner has the full authority of an Associate Deputy Minister, with the exception of Section 33 of the *Financial Administration Act,* reflecting the intention of the Coast Guard to rely on DFO for comptroller functions. The Coast Guard has two Deputy Commissioners, both of whom report to the Commissioner: the Deputy Commissioner, Operations and the Deputy Commissioner, Vessel Procurement.

At Headquarters, there are five directorates (Maritime Services, Fleet, Integrated Technical Services, Integrated Business Management Services, Major Crown Projects), each led by a Deputy Commissioner or Director General (DG) who is responsible for policies, programs, plans, and service standards for their respective functional areas. Each of the five regions is led by an Assistant Commissioner (AC) who is responsible for directing the delivery of all Coast Guard services in the region under their responsibility, consistent with national standards, policies and practices.

This organization and governance information is shown in Figure 1.[3]

[3] This organization chart does not reflect the changes to the Canadian Coast Guard organizational structure announced May 22, 2012, which are to take effect October 1, 2012.

Figure 1 : CCG Management Structure



Coast Guard Management Board (MB) is the Agency's senior decision-making body. The Board is chaired by the Commissioner and comprises the Deputy Commissioners, the Directors General, the Assistant Commissioners, and the Executive Director of the Canadian Coast Guard College. The Senior Human Resources Advisor, the Senior Legal Advisor, the Senior Financial Advisor, the Senior Communications Advisor, and the Executive Advisor to the Commissioner are *ex officio* members of MB. MB is supported by a number of permanent and temporary sub-committees.

Departmental Governance

The Government of Canada's Management Resources and Results Structures (MRRS) is the foundation of a government-wide approach aimed at strengthening the management and accountability of public expenditures and clearly demonstrating results for Canadians. The Program Activity Architecture (PAA) is part of the MRRS. The PAA shows how DFO's programs align with the Department's three strategic outcomes. The alignment of Coast Guard programs to DFO's Strategic Outcomes is illustrated on page 12 under the header "Where We Fit".

In support of the redesigned MRRS, a new governance structure for the Department was put in place effective January 5, 2011. The new governance arrangements align the Department's committee structure with its Program Activity Architecture to ensure effective decision-making, clear accountabilities, and results-based management.

External Advisory Groups

National Marine Advisory Board (NMAB) and Regional Marine Advisory Boards (RMABs) – The NMAB and its six regional counterparts (RMABs) are the Coast Guard's primary interface with the marine shipping industry. They provide a forum for discussion of shared priorities and objectives, as well as for the feedback on service delivery that CCG requires as a service provider.

CCG also participates in Transport Canada-led national and regional Canadian Marine Advisory Councils and Recreational Boating Advisory Councils. Additionally, at the regional level, CCG consults with a variety of stakeholders, including fishers and recreational boaters, through various local fora such as Local Marine Advisory Councils and fishers' advisory groups.

Strategic Advisory Council (SAC) – Chaired by the Deputy Minister of Fisheries and Oceans Canada, SAC comprises Deputy Ministers from departments and agencies that receive support or services from Coast Guard. SAC's role is to provide input to strategic decisions and performance feedback on CCG service delivery.

Senior Project Advisory Committee (SPAC) – Chaired by the Deputy Commissioner, Vessel Procurement and comprised of senior departmental officials from Coast Guard and from other involved federal departments, SPAC provides a forum to orient major procurement projects to achieve national objectives.

The Canadian Coast Guard College Advisory Council, – Chaired by the Deputy Commissioner Operations – the Council, is responsible for the provision of strategic advice and information relative to:

- emerging operational and technical trends, challenges and opportunities in the national and global maritime context;
- emerging changes and trends in the field of maritime education and recruitment, training and systems; and
- current and future educational and training partnership initiatives.

The Council ensures the CCG-College has the breadth of national and global exposure to maritime knowledge and insight, to fulfill its present and future mandate.

WHERE WE FIT:

Coast Guard, Clients and Stakeholders and the Government of Canada

CCG does not operate alone. We work with many clients and stakeholders within and outside DFO. Our activities support the results those clients and stakeholders are seeking to achieve, as well as certain government-wide objectives. These activities, linkages and desired results are shown in the figure below.

CCG PROVIDES THESE SERVICES	TO ACHIEVE THESES RESULTS FOR CANADIANS *	STRATEGIC OUTCOMES	TO HELP OUR CLIENTS AND STAKEHOLDERS ACHIEVE THEIR OWN RESULTS AND OBJECTIVES
MARINE NAVIGATION[4]	The commercial shipping industry and mariners are provided with marine navigation support to facilitate access to/movement through main marine channels.	ECONOMICALLY PROSPEROUS MARITIME SECTORS AND FISHERIES	FOR THE GOVERNMENT OF CANADA, THESE THREE GOVERNMENT-WIDE OUTCOMES: A Safe and Secure Canada; Strong Economic Growth; A Clean and Healthy Environment
ENVIRONMENTAL RESPONSE SERVICES	Environmental, economic and public safety impacts of marine pollution events are mitigated.	SUSTAINABLE AQUATIC ECOSYSTEMS	
SEARCH AND RESCUE SERVICES	Loss of life or injury to mariners in distress is minimized.	SAFE AND SECURE WATERS	
MARINE COMMUNICATIONS & TRAFFIC SERVICES	Vessels have the marine communications and traffic services support they need to transit Canadian waters safely.		
MARITIME SECURITY	Federal enforcement and intelligence communities have adequate support and information to enhance their awareness of vessel movements and respond to on-water incidents.		
FLEET OPERATIONAL READINESS	An operationally capable fleet that responds to the needs and requirements of the Government of Canada.		FOR OTHER GOVERNMENT DEPARTMENTS AND AGENCIES: Their Own Results and Objectives
SHORE-BASED ASSET READINESS	Reliable shore-based assets ready to respond to the operational needs and priorities of the Government of Canada.		
CANADIAN COAST GUARD COLLEGE	Trained operational personnel are ready to respond to the operational needs and requirements of the Government of Canada.		

*performance measures for these program results can be found in Section 5 (page 62) under each program activity

[4] In 2012-2013, the DFO PAA was modified to encompass Aids to Navigation, Waterways Management and Icebreaking Services under the one activity Marine Navigation.

WHERE WE ARE NOW

Coast Guard is facing risks and challenges which place pressure on program delivery and operational capacity, but which also provide positive opportunities for CCG to transform the way it does business as it continues to strive for excellence in serving Canadians and remain responsive to their evolving needs.

CCG's risks and challenges have been identified from a number of sources including:

- The Speech from the Throne (June 3, 2011) prioritizing deficit reduction, jobs and growth and highlighting the North as a cornerstone of Government policy;
- Reports of Parliamentary Committees containing analyses and recommendations bearing on Coast Guard, such as the need to renew its capacity and assets;
- Internal and external reviews, audits and evaluations such as the 2007 Report of the Auditor General, and the 2010 Audits of the Office of the Auditor General (OAG) respecting federal Climate Change Adaptation and Pollution at Sea;
- Departmental and Agency environmental scanning and CCG business situation analysis; and,
- Risk profiling work conducted at the departmental, agency and program levels.

WE WILL RESPOND TO THIS CHALLENGE / RISK	WITH THESE STRATEGIES OR KEY INITIATIVES	WHICH ARE DESCRIBED IN DETAIL ON PAGE:
Human Capital – Maintaining a Skilled and Knowledgeable Workforce **Human Capital is identified as a *Mission Critical Risk* in DFO's Corporate Risk Profile** Coast Guard's dedicated and professional employees will be expected to maintain service delivery while adapting to a down-sizing environment. As a result, CCG will need to continue to invest in its workforce. The challenge is to maintain a skilled and knowledgeable work force with the flexibility to adapt, innovate and make use of new technology, given attrition rates and skilled labour shortages. Attrition and competition in the skilled labour markets for seagoing personnel, which comprises 51% of our labour force, could result in insufficient personnel with the required competencies and certification to operate aboard vessels in a safe and effective manner. Looking ahead, CCG anticipates that approximately 1,745 employees (39% of our total workforce) will have left the Agency by 2016. This includes the potential exit of 766 employees from critical occupational groups (Ships' Officers and Ships' Crew) representing 44% of total projected departures.	A Qualified and Representative Workforce	Page 35
	Develop and Support People	Page 42
	Fair and Effective Management	Page 50
	Marine Communications and Traffic Services Technical Training	Page 78
	Canadian Coast Guard College Transformation Initiative	Page 111
	SAR Capacity and Capability	Page 84
	Ongoing implementation of the Ships' Crew Certification Program	Page 41

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WE WILL RESPOND TO THIS CHALLENGE / RISK	WITH THESE STRATEGIES OR KEY INITIATIVES	WHICH ARE DESCRIBED IN DETAIL ON PAGE:
Evolving Demand for Coast Guard Services **A related 'Hazard or Crisis-type Risk' has been identified in DFO's Corporate Risk Profile** With an improving Canadian economy, marine traffic is expected to increase in the medium to long term. Increases in traffic and related marine incident occurrences, meeting client and stakeholder expectations (e.g. requesting more icebreaking services on the Great Lakes, support in the Arctic) the need to adapt to technological changes in the maritime sector (e.g. professional mariners demanding greater access to electronic navigation information), and climate-change impacts (unpredictable and changing ice conditions, fluctuating water levels and the extension of shipping seasons), are expected to place increasing demands on Coast Guard programs. CCG also needs to respond to the emerging maritime priorities of the Government of Canada and support requirements of other government departments. With the Arctic continuing to be a cornerstone of the government's policy agenda, actions and presence for sovereign development and the stewardship of Northern waters are creating new challenges and opportunities for Coast Guard. Meeting the needs of all users and stakeholders is becoming increasingly difficult for Coast Guard given demands to hold on to current services while introducing new services within available resources. For example, as the seasons become longer in the Arctic, there is more demand from Stakeholders for Coast Guard to provide aids to navigation and other services. This is a challenge for CCG given its decreasing funds.	Update Coast Guard's Fleet Renewal Plan in Line with Government Direction	Page 18
	Procurement of New and Replacement Vessels	Page 18
	CCG's Shore-Based Asset Renewal Plan	Page 22
	An Arctic Strategy that will define CCG's approach to establishing efficient and safe Arctic marine corridors	Page 24
	Strengthening our Environmental Response Program	Page 27
	Implementation of e-navigation	Page 25
	Post-Panamax Study, St. Lawrence River	Page 71
	NAVAREAs (Navigational Areas)	Page 77
	Service Level Agreements with DFO Clients	Page 34
	Regional Perspectives • Labrador Services (NL) • Arctic ATN and Charting Sub-committee (C&A) • Casualty tracking system (CasTrack) (Pacific)	Page 53
Physical Infrastructure – Ageing Assets **This risk is directly linked to the *Mission Critical Risk* of Physical Infrastructure that has been identified in DFO's Corporate Risk Profile. There are also *potential* links to the *Mission Critical Risk* on Communications & Reputation.** Since 2005, $6.8B in fleet investments has been committed for the Canadian Coast Guard (for more details, see Strategic Priorities: 1. Renewing Assets, page 17). While this funding will improve the condition of the fleet over time as existing vessels are repaired and new vessels are procured and delivered, currently, 78% of Coast Guard large vessels exceed their operational life and recent condition assessments demonstrate that 97% require significant refurbishment or repair. The small-vessel fleet has a better age profile as it has benefited from recent >>>	Maintain the Fleet Renewal Plan to ensure congruence with Government directions and Coast Guard's long-term vision of its programs and services	Page 18
	Procurement of New and Replacement Vessels	Page 18
	Implement Integrated Technical Services A-base Review Management Action Plan Recommendations	Page 107

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WE WILL RESPOND TO THIS CHALLENGE / RISK	WITH THESE STRATEGIES OR KEY INITIATIVES	WHICH ARE DESCRIBED IN DETAIL ON PAGE:
vessel delivery. However, of Coast Guard's 22 helicopters, 95% exceed their operational life. The condition of the fleet has implications for vessel and helicopters reliability and availability, and may impact services to Canadians. It also implies increased maintenance costs. The fleet has very limited operational flexibility and no excess capacity. Maintaining an ageing core fleet capacity until new vessels are delivered is a significant challenge. Coast Guard is also faced with the challenge to deliver maritime services and maintain operational fleet capabilities with a shore-based infrastructure (e.g., CCG bases, fixed aids to navigation, radio towers, and Marine Communications and Traffic Services (MCTS) facilities) that is ageing and is beyond its overall operational life expectancy. Despite significant investments, shore-based assets continue to deteriorate or become outdated or rendered obsolete as a result of technological advances leading to issues such as equipment failures and inadequate preparedness levels, that will result in reductions in program performance and may impact on the security of navigation. The overarching challenge is to maintain existing infra-structure and to plan for, acquire and maintain assets needed for effective and efficient operations.	CCG Shore-Based Asset Renewal Plan	Page 22
	Update and Maintain Affordable Service-Level Agreements with Clients	Page 34
	Continuous Improvement of Asset Maintenance management procedures	Page 23
	Aids to Navigation and MCTS Programs Capital Investment	Page 22
	Development of an MCTS – ITS Service Level Agreement	Page 77
	Implementing improvements for CCG's cost recovery practices associated with monitoring and responding to marine pollution incidents in Canadian waters.	Page 89
	Coast Guard Environmental Response Capacity Review to inform a National Equipment Strategy and Capital Investment	Page 27
	Regional Perspectives • Maritimes Region Base Consolidation	Page 56
Functioning as a Truly National Institution Both the Auditor General and CCG's internal A-Base Review indicated that CCG needs greater consistency in the design and delivery of its national programs while safe-guarding regional operational authority and responsibilities.	Complete the Risk Management Framework and Methodology for CCG's Programs and Operations	Page 35
	Procurement of New and Replacement Vessels	Page 18
Partnerships in Service Delivery **Also identified in DFO's Corporate Risk Profile, as Partnering and Collaboration.** CCG relies on the assistance of others to work effectively and efficiently to address functions critical to the delivery of CCG programs and services, which include corporate services, acquisitions, and procurement. Coast Guard must work closely with other federal departments and central agencies to secure administrative and program efficiencies and to obtain the inputs critical to the delivery of services. The Agency also works with and relies on other federal government departments, agencies, and volunteers (such as the Canadian Coast Guard Auxiliary and a variety of other stakeholders) to help fulfill federal mandates for Canadians. CCG's challenge in this regard is to strengthen the effectiveness of our partnerships and devise new ways and means to improve productivity.	Update the CCGA Contribution Agreements for approval, in consultation with the CCG Auxiliary.	Page 83
	Strengthening our Environmental Response Program	Page 27
	Implementation of e-navigation	Page 25
	Post-Panamax Study, St. Lawrence River	Page 71
	Marine Security Enforcement Team	Page 93
	Marine Security Operations Centres	Page 94
	Common data format and standard for reporting channel bottom conditions (Regional perspectives, Pacific key initiative)	Page 61
	Delivering client focused Arctic Services	Page 24
	CCG's Shore-Based Asset Renewal Plan	Page 22

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WE WILL RESPOND TO THIS CHALLENGE / RISK	WITH THESE STRATEGIES OR KEY INITIATIVES	WHICH ARE DESCRIBED IN DETAIL ON PAGE:
Managing Information for Decision-Making **This CCG risk is directly linked to the corporate risk of Information for Decision-Making that is identified in DFO's Corporate Risk Profile.** A number of reports, reviews, and exercises have highlighted the need for Coast Guard to improve its ability to acquire, apply, manage and communicate the information needed for business, operational, maintenance and investment decision-making, as well as in reviewing performance measurement. It is important to ensure that citizens, the private sector and other partners are able to benefit from availability of data and information and the exchange of ideas with Coast Guard. Such information is critical to support day-to-day operations, for strategic decision-making, and for accountability to those we serve.	Modernization of the Business Management and Resource Allocation Process	Page 33
	Enabling the Implementation of e-navigation	Page 25
	Common data format and standard for reporting channel bottom conditions (Regional perspectives, Pacific key initiative)	Page 61
	Procurement of New and Replacement Vessels	Page 18
Maritime Security CCG has a broad mandate to provide support to other government departments, and has been contributing to the collaborative delivery of Canada's maritime security in partnership with the federal intelligence and enforcement community. At present, the Coast Guard lacks the mandate and the means to play a more significant role in enforcing Canadian law and in protecting national security. The challenge will be to strengthen Coast Guard's focus on maritime security and its ability to patrol Canada's coasts and support enforcement of federal laws on our oceans and Great Lakes.	Reinforcing Contribution to Canada's Maritime Security	Page 29
	Delivering client focused Arctic Services	Page 24
	Marine Security Enforcement Team	Page 93
	Marine Security Operations Centres	Page 94
	Automatic Identification System	Page 93
	Long Range Identification and Tracking System	Page 93
Financial Capacity **Financial Capacity is identified as a *Mission Critical Risk* in the DFO Risk Profile.** CCG strives to maintain service levels to Canadians while being challenged by decreasing funds. These reductions come from many areas including administrative reductions, unfunded salary increases and vote netted revenue shortfalls and more recently, through measures aimed at deficit reduction. In parallel, the cost of doing business is rising (e.g. increasing costs to maintain and repair assets, vulnerability to marine fuel price fluctuations). Possible consequences include falling short of reliability targets for aids to navigation, failure of marine structures and reduction in bathymetric surveys needed for safe vessel transits in channels, any of which could impact public safety. There are implications for CCG's capital program as assets deteriorate to the point where significant capital investment will be required to make major repairs or replace assets. Current CCG Marine Services Fees do not recover the full cost of services allocated to the commercial marine industry. To address this revenue shortfall CCG will pursue an incremental approach based on preconditions set out in the *User Fees Act*.	Modernization of the Business Management and Resource Allocation Process	Page 33
	Establish a Marine Services Fees Task Force to review and rebuild the costing methodology In Accordance with the *Users Fees Ac*	Page 32
	Implementation of New Business Management and Resource Allocation Process for CCG	Page 33
	Coast Guard Programs Capital Investment (ATN, MCTS, ER, Waterways, Fleet, Maritime Security, SBAR)	Page 117
	CCG's Shore-Based Asset Renewal – 15 year plan for shore-based assets capital investments.	Page 22

PRIORITIES

The Coast Guard is responding to the risks and challenges outlined in Section 2 with the following strategic and management priorities that continue to focus on three critical success factors - our people, our assets and our future.

In addition to the priorities discussed in this section, CCG manages a wide variety of day-to-day operations and activities, details of which can be found in Sections 4 and 5.

STRATEGIC PRIORITIES
1. Renewing Assets
2. Delivering Client Focused Services
3. Strengthening our Environmental Response Program
4. Reinforcing Contribution to Canada's Maritime Security

MANAGEMENT PRIORITIES
1. Adapting to the New Fiscal Realities
2. Enhancing Business Management Practices
3. Workforce Management

STRATEGIC PRIORITIES

2011-2012 Accomplishments

Fleet Renewal Plan

- **Continued to advance CCG Fleet Renewal Plan.**
- **Engaged stakeholders on future CCG vessel needs.**

Project Management Framework

- **Developed a Project Management Framework and related Implementation Plan.**

Procurement of New and Replacement Vessels

- **Mid-Shore Patrol Vessels** - Began construction of the second, third and fourth Mid-Shore Patrol Vessels.
- **Offshore Fisheries Science Vessels** – Finalized the design of the Offshore Fishery Science Vessels.
- **Offshore Oceanographic Science Vessel** – Finalized the design of an Offshore Oceanographic Science Vessel.
- **Polar Icebreaker** – Awarded the contract for the new Polar Icebreaker design.
- **Air Cushion Vehicle** – Managed the construction of the Air Cushion Vehicle.

1. RENEWING ASSETS

As an operational Agency, the Canadian Coast Guard relies heavily on its vessels and shore-based assets to deliver maritime programs and services critical to Canadians. Of its $725M annual budget, approximately 80% supports operational readiness, including the acquisition, operation, and maintenance of fleet assets (e.g. vessels, small craft and helicopters) and of infrastructure assets (e.g. communication towers, radio equipment, aids to navigation). These assets are essential in ensuring that Coast Guard can deliver its mandated activities and support the operations of other government departments. This includes supporting economic prosperity, sustainable aquatic ecosystems, the safety and security of navigational waterways, and contributing to Canada's sovereignty.

In its Corporate Risk Profile and Investment Plan Risk Assessment 2010/11-2014/15, Coast Guard identified investment in the asset base as a high risk area, anticipating that the organization may be unable to procure and maintain its assets in a timely fashion, in order to deliver mandated services. Coast Guard's asset renewal initiatives are, therefore, essential to ensure the maintenance and optimization of its operational capabilities and readiness and to position it as an enduring organization that can effectively and efficiently serve Canadians into the future.

To support investment planning for asset renewal, Coast Guard has developed a strong Fleet Renewal Plan, which formed the basis for over $6.8 billion in fleet investments announced by the Government of Canada since 2005. Coast Guard needs to continue delivering on fleet investments, and focus on Shore-Based Asset Renewal.

A. COAST GUARD'S FLEET RENEWAL INITIATIVE

Since 2005, the Government of Canada has continuously demonstrated strong commitment to the Canadian Coast Guard. Economic Action Plan 2012 recently announced a significant investment in the Canadian Coast Guard and Canada's shipbuilding industry. Over the next 11 years, the Government of Canada has committed approximately $5.2 billion to renew Coast Guard's fleet of vessels and helicopters. This investment will allow Coast Guard to continue renewing its fleet of vessels and helicopters, as current vessels reach the end of their operational lives. It will also ensure Coast Guard can continue to carry out its mandate of saving lives, keeping Canadian ports and waters safe and accessible, as well as protecting fisheries, supporting maritime security, Canadian sovereignty, marine scientific research, and protecting the marine environment.

This announcement adds to the $1.4 billion that had already been committed in the Canadian Coast Guard fleet for the procurement of new mid-shore patrol vessels, scientific research vessels, a hovercraft and Canada's first polar icebreaker; and to the $175 million announced as part of Canada's Economic Action Plan to undertake major repair work on 40 of its large vessels and to acquire 98 new small craft, barges and boats.

Coast Guard's Fleet Renewal Plan

The Government of Canada's investment in the Canadian Coast Guard fleet addresses priorities outlined in the Coast Guard's Fleet Renewal Plan (the Plan). The Plan is an investment strategy that outlines the appropriate number, classes and mix of vessels and helicopters needed over 30 years to maintain current programs and services. It is based on sound procurement principles such as multi-taskability and appropriate lifecycle management practices, and is adaptable to the evolving needs of the Government. The Plan also schedules appropriate life-cycle asset management measures, such as mid-life modernizations, in order to maximize the operational life of the Fleet.

COMMITMENT	LEAD
2012-2013	
Maintain the Fleet Renewal Plan to ensure congruence with Government directions and Coast Guard's long-term vision of its programs and services.	DC,VP

Coast Guard's Fleet Procurement Strategy

The renewal of the Canadian Coast Guard's fleet of large and small vessels is taking place within the context of the National Shipbuilding Procurement Strategy (NSPS).

The NSPS established a long-term strategic sourcing relationship between the Government of Canada and two Canadian shipyards for the construction of its large vessels. A major milestone was reached in February 2012 with the signing of an umbrella agreement with Vancouver Shipyards Co. Ltd. to build Canada's large non-combat vessels. To date, Coast Guard's Polar Icebreaker and four offshore science vessels are part of the non-combat component of the NSPS.

Contracts for small vessel construction will be awarded to other Canadian shipyards, and ongoing refit and repair work will be open to all shipyards through a competitive process. Helicopters and small craft will also be procured competitively.

Project Management Framework

Coast Guard continuously improves its expertise and project management capacity and strives to adopt best practices. By aiming at standardizing processes, tools, and documentation used in all aspects of project management, the Project Management Framework that was developed in 2011-12 will improve Coast Guard's organizational project management capacity.

COMMITMENT	LEAD
2012-2013	
Implement Coast Guard's Project Management Framework in vessel procurement.	DC,VP

Procurement of Current Vessel Procurement Projects

- **Mid-Shore Patrol Vessels**

Coast Guard is procuring nine Mid-Shore Patrol Vessels (MSPV) to support the department's fisheries Conservation & Protection program as well as the Maritime Security program. Construction of the first MSPV began in October 2010, the construction of two other MSPVs commenced in 2011 and two in 2012. The first two vessels are expected to be delivered in 2012. The remaining vessels will be delivered by 2014.

COMMITMENT	LEAD
2012-2013	
Manage the construction of Mid-Shore Patrol Vessels in accordance with negotiated contractual milestones.	DC, VP
Deliver three Mid-Shore Patrol Vessels.	DC, VP
2013-2014	
Manage the construction of Mid-Shore Patrol Vessels in accordance with negotiated contractual milestones.	DC, VP
Deliver three Mid-Shore Patrol Vessels.	DC, VP
2014-2015	
Deliver the final three Mid-Shore Patrol Vessels.	DC, VP

- **Offshore Fisheries Science Vessels**

Coast Guard is procuring three Offshore Fisheries Science Vessels (OFSV) to support critical scientific research and ecosystem-based management. The design of the vessels was completed in early 2012 and Coast Guard is working with Vancouver Shipyards Co. Ltd. to advance this project. A contract for production engineering is planned to be awarded in 2012. All vessels are expected to be delivered by 2015; however, delivery dates will be discussed with Vancouver Shipyards as they prepare for production. Firm delivery dates are expected to form part of the Construction Contract anticipated in 2013.

COMMITMENT	LEAD
2012-2013	
Award a production engineering contract.	DC, VP
2013-2014	
Award the contract to build the Offshore Fisheries Science Vessels.	DC, VP
2014-2015	
Deliver the first two Offshore Fisheries Science Vessels.	DC, VP

- **Offshore Oceanographic Science Vessel**

Coast Guard is procuring one Offshore Oceanographic Science Vessel (OOSV) to help the Department fulfill its science mandate. The design of the vessel was completed in Fall 2011 and Coast Guard is working with Vancouver Shipyards Co. Ltd. to advance this project. A contract for production engineering is planned to be awarded in 2012-13. The OOSV is expected to be delivered by 2016; however, the delivery date will be discussed with Vancouver Shipyards

as they prepare for production. A firm delivery date is expected to form part of the Construction Contract anticipated in 2014-15.

COMMITMENT	LEAD
2012-2013	
Award a production engineering contract.	DC, VP
2013-2014	
Manage the production engineering contract in accordance with negotiated contractual milestones.	DC, VP
2014-2015	
Award the contract to build the Offshore Oceanographic Science Vessel.	DC, VP

- **Polar Icebreaker**

Canada's first Polar Icebreaker, *CCGS John G. Diefenbaker,* will be designed, built, and delivered in time for the decommissioning of the Coast Guard's largest and most capable heavy ice-breaker, *CCGS Louis S. St-Laurent.* A vessel design contract was awarded in November 2011 and the construction contract is planned to be awarded in Spring 2014. The Polar Icebreaker remains on track for delivery in late 2017.

COMMITMENT	LEAD
2012-2013	
Conduct the Preliminary Design Review.	DC, VP
2013-2014	
Conduct the Final Design Review.	DC, VP
Seek Effective Project Approval.	DC, VP
2014-2015	
Award the contract to build the Polar Icebreaker.	DC, VP
Manage the construction of the Polar Icebreaker in accordance with negotiated contractual milestones.	DC, VP

- **Air Cushion Vehicle**

Coast Guard is procuring an Air Cushion Vehicle (ACV) for search and rescue coverage and aids to navigation services. A contract for the construction of the ACV was awarded to Griffon Hoverwork Ltd. of the United Kingdom in March 2011. The vessel is expected to be delivered by 2013.

COMMITMENT	LEAD
2012-2013	
Manage construction of the Air Cushion Vehicle in accordance with negotiated contractual milestones.	DC, VP
2013-2014	
Deliver the ACV.	DC, VP

- **Near-Shore Fishery Research Vessel**

As part of the Economic Action Plan, the CCG was to deliver two 22-metre and one 25-metre Near-Shore Fisheries Science Vessels by end of fiscal year 2011-2012. The project has experienced construction delays. It is expected that CCG will receive the 3 vessels by the close of fiscal year 2012-13.

COMMITMENT	LEAD
2012-2013	
Accept delivery of two 22-metre Near-Shore Fishery Research Vessel and one 25-metre Near-shore Fishery Research Vessel.	DG, ITS

B. COAST GUARD'S SHORE-BASED ASSET RENEWAL INITIATIVE

2011-2012 Accomplishment:

- The Shore-Based Asset Renewal Framework describing the vision, direction and guiding principles for renewing CCG's shore-based assets has been completed and an action plan has been created to guide the ongoing development and implementation of the Shore-Based Asset Renewal Plan.

The CCG manages $1.5 billion (estimated replacement value) in shore-based assets in support of the Aids to Navigation (ATN) and Marine Communications and Traffic Services (MCTS) programs. Although short- to medium-term planning for shore-based infrastructure is incorporated into the CCG Integrated Investment Plan, the value and importance of these assets also justify creation of a long-term plan.

In our 2011-2012 Business Plan, the Canadian Coast Guard indicated our intention to publish a Long-term Plan for Shore-based Infrastructure in support of the CCG Asset Renewal priority. The Shore-Based Asset Renewal Plan (SBAR), as it is now referred to, will present a 15-year plan for the capital investments required to ensure the reliability and availability of CCG's shore-based assets to meet the current and future needs of the ATN and MCTS programs. The SBAR Plan will allow the CCG to strategically plan and prioritize maintenance, replacement and divestiture activities across these asset-intensive programs.

The Agency completed an important portion of the SBAR plan in 2011-2012. CCG has:

- Leveraged asset condition reports and asset class plans to gain a better understanding of our current state;
- Established guiding principles that will be used to guide investment decisions;
- Identified short, medium and long-term trends affecting ATN and MCTS and highlighted their impacts on investment decisions;
- Identified the program requirements that drive our investment needs for the next 15 years;
- Established a framework with which CCG can evaluate future developments in technology, international regulations, client capabilities, vessel traffic and other factors that affect CCG's programs' requirements; and,
- Developed a timeline and next steps to build the SBAR Plan.

In 2012-2013 we will continue our planning efforts and extend the current plan content to include:

- A concrete and shared vision for the future of the assets to be used to deliver Aids to Navigation and Marine Communications and Traffic Services (including a guideline to provide national direction regarding disposal of assets);
- An assessment of the vision's impact on the CCG organization from an infrastructure perspective as well as from a human resources perspective;

- A high-level assessment of the costs of implementing the vision (including a 15-year view of investments required);
- An identification of implementation options to achieve the vision set out in the SBAR Plan; and,
- Our approach to oversee implementation and to monitor progress towards achievement of the SBAR Plan vision.

COMMITMENT	LEAD
2012-2013	
Complete a first draft of the Shore-Based Asset Renewal Plan, based on current service delivery.	DG, MS DG, ITS
2013-2014	
Finalize the Shore-Based Asset Renewal Plan.	DG, MS DG, ITS

C. IMPROVE ASSET MAINTENANCE

As CCG renews the shore-based assets and vessels critical to its program delivery, it is also focusing on improving asset maintenance practices to ensure these capital investments as well as existing program assets remain available and reliable over the duration of their intended operational life. Several initiatives to improve maintenance practices were undertaken over the last three fiscal years, with the Vessel Maintenance Management Review (VMMR) being the most significant one.

Subsequent to the 2007 Report of the Auditor General, the CCG Commissioner requested that a national review of CCG's vessel maintenance program be conducted to provide an assessment and validation of the lifecycle management strategy for its vessels, including supporting systems, procedures, and operations. The Vessel Maintenance Management Review resulted in 23 recommendations, out of which a three-year action plan was developed, and has, for the most part, been implemented.

The activities to address the 23 recommendations, as part of the three-year plan, included improving maintenance documentation such as plans and specifications, improving management processes and activities, clarifying roles and responsibilities, and improving CCG's ability to prioritize and plan maintenance of CCG vessels.

Fiscal year 2011-2012 was the last year of the three-year action plan to improve vessel maintenance management. Most commitments in the plan were achieved during 2010-2011. The remaining activities in the action plan are to address technical training for vessel maintenance and, to fully operationalize the Centre of Expertise for vessel maintenance, which was deferred to 2012-2013.

CCG has also taken steps to improve the information systems required to deliver more efficient asset maintenance as well as all aspects of life-cycle asset management. CCG's Asset Management System (AMS) which consists of two component systems, MAINTelligence, used on-board large vessels; and MAXIMO, used for shore-based assets and station-based vessels, is the critical information management system for life cycle asset management. It provides a focal point for standardizing maintenance procedures and materiel management

practices; allows the tracking of maintenance history and identifying actual maintenance costs; and institutes a system for authorizing, scheduling, and tracking the maintenance work undertaken by CCG staff.

Improvements to AMS are a mitigation strategy to respond to the risk identified in both the DFO and CCG Corporate Risk Profiles relating to the management of information. It will improve CCG's ability to store maintenance data and support day-to-day operations as well as strategic business and investment decision making, thereby increasing efficiency and improving the quality of asset management services.

MAXIMO version 7 was successfully deployed in 2011-2012. CCG will now turn its attention to inputting key maintenance plans and related data into MAXIMO, thereby increasing its effectiveness as a tool for planning and decision making.

2. DELIVERING CLIENT FOCUSED SERVICES

A. ARCTIC MARINE CORRIDORS

Our Arctic activities, many of which are delivered in partnership with others, include:

- Escorting commercial ships through ice to ensure access to Northern communities;
- Supporting scientific endeavours such as hydrographic charting and marine science;
- Maintaining some aids to navigation in Canadian Arctic waterways;
- Delivering primary response capability to respond to pollution incidents north of 60;
- Providing maritime search and rescue services;
- Providing marine communications and traffic services from a seasonal Centre;
- Broadcasting weather and ice information and navigational warnings;
- Delivering food, cargo, and fuel to remote sites where commercial services are unavailable;
- Conducting joint exercises with international partners and the Department of National Defence (e.g. Operation NANOOK); and
- Developing an improved awareness of the Arctic maritime domain through vessel identification and tracking security initiatives.

The Arctic is on the cusp of significant environmental changes and economic growth. Warming Arctic temperatures are leading to polar ice retreating at unprecedented rates and leading to new opportunities in shipping and natural resource extraction.

CCG has a history of providing services in the Arctic where maritime transportation is fundamental to supporting the northern economy, communities, and reinforcing Canada's sovereignty. As such, CCG must adapt to the changing Arctic environment and take proactive measures to prepare for expected increases in maritime transportation.

Relative to marine infrastructure in Southern waters, Canada's marine infrastructure in the Arctic is less established. As maritime traffic in the Arctic increases, CCG is focusing on

ensuring that the appropriate maritime services and systems are in place to support the safe navigation of mariners in the Arctic.

DFO and CCG worked closely to establish a long-term Integrated Arctic Vision. Moving forward, CCG is developing an Arctic Strategy, grounded in risk-based principles that will define the organization's approach to establishing efficient and safe, Arctic marine corridors. Provision of safe Arctic marine corridors will facilitate sustainable growth in maritime transportation as a key enabler to realizing the broader Departmental Integrated Arctic Vision and in support of Canada's other northern priorities.

Finally, as maritime navigation is a multi-agency responsibility, the CCG is actively pursuing opportunities to work in cooperation with other departments to implement its Arctic Strategy. This Strategy will also align CCG's operations in the Arctic to advance: CCG priorities, DFO strategic outcomes, and the Government of Canada's Northern Strategy.

COMMITMENT	LEAD
2012-2013	
Develop a CCG Arctic strategy that will define efficient and safe Arctic marine corridors.	DG, MS
2013-2014	
Articulate implementation plan and initiate consultations with key stakeholders, including Aboriginal Groups to validate the Arctic Strategy and proposed Implementation Plan.	DG, MS

B. IMPLEMENTATION OF E-NAVIGATION

2011-2012 Accomplishments:

- Finalized a report that includes the analysis of e-navigation data sources availability and ways to implement a national e-navigation portal and developed a national e-navigation web page.
- Continued to work collaboratively with stakeholders on the evaluation of a dynamic under keel clearance system.

The International Maritime Organization (IMO) expects e-navigation to be implemented world-wide in the next 10 to 15 years. Through its implementation of several test bed projects that have since migrated to operational status, such as MarInfo in the Quebec Region and AVADEPTH in Pacific Region, CCG is well positioned to take a leadership role in e-navigation both domestically and internationally, to be at the forefront of its implementation, and to influence international standards.

WHAT IS E-NAVIGATION?

E-navigation refers to the ability for accurate and reliable navigational information to be available and used by vessels and shore authorities to support effective decision-making, minimize human error and enhance communications.

Implementing e-navigation in a coordinated and organized manner in Canada involves collaborating with multiple federal departments and the shipping industry. This will result in a significantly enhanced safety. It will have positive economic effects and will increase environmental protection. To this end, the CCG is working in close partnership with

Transport Canada, the Canadian Hydrographic Service, and Environment Canada. In parallel, the marine industry, pilots, ports, and mariners are also part of the governance structure for implementing e-navigation in Canada. A national committee as well as regional ones are in place involving relevant stakeholders.

The CCG consulted marine stakeholders in 2009-2010 on e-navigation. This consultation helped to identify the user needs for each major maritime region and highlighted key requirements for e-navigation. Results of this survey were shared both nationally and internationally, and became the basis for the development of a Canadian e-navigation User-Needs Matrix. This matrix prioritizes the services that are expected to be provided by shore authorities to mariners. It is sub-divided into navigational areas in order to provide the right information to the right area without overloading mariners with unnecessary data. A national vision and a high-level implementation plan for e-navigation were completed in 2010-2011, in collaboration with other key federal departments as listed above. In 2011-2012, CCG performed a data gap analysis readiness assessment and has performed an analysis of ways to implement a national e-navigation portal for e-navigation. In 2012-2013, CCG will develop a concept of operation and the implementation plan for the e-navigation portal. The e-navigation initiative will continue with full collaboration of all parties involved.

Specifically for Quebec Region, Coast Guard continues to work, in collaboration with partners on the evaluation of a dynamic under keel clearance system, in order to optimize use of the St. Lawrence River shipping channel.

COMMITMENT	IN RESPONSE TO...	LEAD
2012-2013		
Begin the standardization process of e-navigation data sources and services.	AG	DG, MS
Develop a concept of operation and an implementation plan for the e-navigation portal.	AG	DG, MS
Continue to work collaboratively on the e-navigation phase II project toward the implementation of a dynamic under keel clearance system for use in the St. Lawrence River shipping channel.	AG	AC, Quebec

3. STRENGTHENING OUR ENVIRONMENTAL RESPONSE PROGRAM

2011-2012 Accomplishments:

- Began implementation of Integrated Management Action Plan deliverables to address recommendations from the Commissioner of the Environmental and Sustainable Development (CESD) and internal audits.
- Continued to co-chair the Interdepartmental Marine Pollution Committee which was established to promote a collaborative, interdepartmental approach to marine pollution prevention, preparedness, response and recovery.
- Developed draft core crisis leadership competencies for Canadian Coast Guard senior management.
- Received approval to proceed with development of an Incident Command System implementation plan for the Environmental Response Program.

Over the years the Canadian marine pollution risk profile has changed, with increasing vessel traffic in the Arctic, resumed interest in the Beaufort Sea oil and gas exploration, increased tonnage of hazardous and noxious substances being transported within Canadian waters, and impending deep sea drilling in the North Atlantic. As a result, there are heightened public expectations that the Government of Canada will be ready and able to respond to marine spills to protect coastal communities and Canadian interests.

The prevention of and response to pollution in the marine environment is a shared responsibility among a number of federal departments and agencies. In 2010, the Interdepartmental Marine Pollution Committee (IMPC) was formed to support the Government of Canada's obligations and objectives related to marine pollution, focusing on interdepartmental collaboration to strengthen Canada's ability in prevention, preparedness, and response and recovery capabilities to marine pollution events. In 2011, 5 sub-committees were formed to support the Interdepartmental Marine Pollution Committee and each are making progress in addressing the recommendations from the 2010 audit released by the CESD. In 2012-13, the Coast Guard will continue to implement an Integrated Management Action Plan to address recommendations from both the Commissioner of the Environment and Sustainable Development audit and internal audits and will report back on progress made against the audit recommendations.

Re-invigoration of the Environmental Response program was identified as a priority in the 2011-2012 Report on Plans and Priorities. For 2012-2013, the Environmental Response Program will continue the development of the National Equipment Strategy by finalizing the Canadian Coast Guard's environmental response capacity review, taking into consideration industry capacity, and marine pollution risks in Canadian waters identified in risk assessments. Following the 2011-2012 review of the CCG's Response Management System and the Incident Command System, as recommended in the

CESD Audit, in 2012-2013 the Program will develop an implementation plan to migrate to the Incident Command System to ensure that CCG is capable of supporting an inter-operable response to a major oil spill in Canadian waters.

In addition to addressing audit recommendations, the CCG will continue to build on lessons learned from real-life response activities. The CCG will finalize the core crisis leadership competencies, and develop a training plan for use by Coast Guard senior management who may be called on during a large marine pollution incident.

Along with strengthening domestic partnerships, CCG is also affirming international partnerships to ensure mechanisms are in place should Canada require response assistance from other nations. Existing bi-national plans are being updated with the United States Coast Guard, and new partnerships are being established with Arctic nations under the auspices of the Arctic Council. As Head of the Canadian Delegation to the Arctic Council Task Force on Oil Preparedness and Response, the Canadian Coast Guard will assist in the development of a new international instrument that will provide for the provision of mutual aid between Arctic nations during significant oil spill events in the Arctic.

COMMITMENT	IN RESPONSE TO...	LEAD
2012-2013		
Finalize the Canadian Coast Guard's environmental response capacity review, and implement.	DFO and CESD audits	DG, MS
Evaluate the feasibility for implementation of the Incident Command System across Coast Guard.	DFO and CESD audits	DG, MS
Finalize the core crisis leadership competencies, and develop a training plan for use by CCG Senior Management.		DG, MS AC, Maritimes
Aid in the development of an international instrument on Arctic marine oil pollution preparedness and response.		DG, MS

4. REINFORCING CONTRIBUTION TO CANADA'S MARITIME SECURITY

National security is a fundamental role of a federal government and a priority for the Government of Canada. An enhanced level of security in Canada's marine transportation system strengthens Canada's capacity to address national and international concerns with respect to maintaining an acceptable level of security in the maritime domain. In support of national security, CCG uses its fleet, on-water expertise, policy know-how and extensive vessel monitoring systems to:

- Enhance awareness of possible maritime security threats;
- Support on-water law enforcement and responsiveness; and,
- Enhance collaboration with departments and agencies throughout the maritime security community.

In April 2010 the Standing Senate Committee on Fisheries and Oceans tabled its report, *"Controlling Canada's Arctic Waters: Role of the Canadian Coast Guard"*, in which it recommended that Coast Guard icebreakers be armed. The Government of Canada responded in October 2010, indicating that it would review Coast Guard's enforcement role, including the possibility of arming Coast Guard icebreakers. Next steps with regards to the enforcement review will be informed by Government direction, which is anticipated in 2012.

The CCG is at an important juncture in its history, as the organization considers the implications of an organizational shift from a maritime safety orientation to a culture that is influenced by both safety and national security perspectives. Clear and effective communications remains an important element of this future shift and we will continue to implement various awareness and integration initiatives from the Maritime Security Communications Strategy developed in 2011-12.

It is also clear that Arctic security and sovereignty are federal priorities. The Canadian Coast Guard, as the main federal operational presence in Arctic waters and key contributor to maritime domain awareness, plays a key maritime security role. Additionally, CCG has begun establishing Automatic Identification System (AIS) coverage in key Arctic passages. To further improve both maritime safety and security, CCG is examining the potential for establishing additional terrestrial AIS test sites in the Arctic.

The Canadian Coast Guard also participates in the multi-departmental Marine Security Operations Centres (MSOC). CCG contributes significant data on maritime traffic, including associated on-water activities and analyzes this

data to support and enhance maritime domain awareness on Canada's three coasts and in the Great Lakes-St. Lawrence area. With CCG's 24/7 presence, the introduction of standardized procedures will allow a more uniform level of service to our interdepartmental partners within the MSOCs.

COMMITMENT	LEAD
2012-2013	
Continue to implement various awareness and integration initiatives outlined in the communications strategy.	DC, Ops
Finalize the national Standard Operating Procedures Manual for CCG's engagement in MSOCs, and develop associated MOUs or SLAs as required with partners.	DC, Ops

MANAGEMENT PRIORITIES

1. ADAPTING TO THE NEW FISCAL REALITIES

ECONOMIC ACTION PLAN

In 2007 the Government of Canada announced that each Department would undergo a Strategic Review, which is an assessment of all direct program spending to ensure programs are managed effectively and efficiently.

In 2010-2011, DFO reviewed direct program spending and the operating costs of the major statutory programs, in order to assess the programs' alignment with the priorities of Canadians and federal responsibilities. Considerable time was spent working through various proposals that were put forward for consideration as part of the Budgetary process. The Department's focus was on how Strategic Review requirements could be met while moving forward with its transformative agenda.

As part of the Strategic Review implementation, some CCG programs are undergoing adjustments, which will help reduce the Department's overall budget. DFO will phase in spending reductions over a three-year period. By the end of the process in 2013-14, DFO's annual budget will have been reduced by $56.8 million. Some changes that will affect CCG include:

- the consolidation of marine search and rescue co-ordination services in Eastern Canada (see page 84);
- the termination of the Loran-C navigation system (see page 107); and
- the consolidation of the Arctic Marine Communications and Traffic Service Centres in Inuvik, Northwest Territories and Iqaluit, Nunavut into a single Marine Communications and Traffic Services Centre in Iqaluit, Nunavut (see p.78).

In Budget 2011, the Government announced its *deficit reduction action plan,* (formally called Strategic Operating Review) a process which involved the review of direct program spending in order to achieve at least $4 billion in ongoing annual savings by 2014–15.

All departments reviewed their program spending as part of the Government of Canada deficit reduction initiative. Fisheries and Oceans Canada and Canadian Coast Guard programs and services have contributed to that effort by focusing on core mandate responsibilities, taking advantage of modern technologies and continuing to seek cost efficiencies.

It is anticipated that further measures will be required resulting from Budget 2012. The budget for the Department of Fisheries and Oceans will be reduced by $79 million and Coast Guard will be asked to contribute its share. This will necessitate a transformative action plan that not only meets desired targets but ensures that Coast Guard is continuing on its path as a modern, streamlined and efficient service organization. As we work

on transformation some decisions have been taken and those known, at publishing time, have been summarized in Annex A (p.125).

MARINE SERVICES FEES TASK FORCE

The intent of the Canadian Coast Guard is to establish a task force to review and rebuild the Marine Services Fees costing methodology with a view to amending the fees.

Based on the original costing methodology, the Marine Services Fees do not recover the full cost of services allocated to the commercial marine industry. To address this shortfall, CCG will pursue an incremental approach based on preconditions set out in the *User Fees Act*.

In 2012-2013, CCG will establish a task force to review and rebuild the costing methodology of the Marine Services Fees and assess the viability of increasing and/or expanding its application to commercial users. Following in 2013-2014, we will establish standards, comparable to those instituted in other countries, upon which any changes to the fees will be evaluated. Finally, in 2014-2015, the proposed amendments to the Marine Services Fees will be tabled in Parliament.

A stakeholder consultative framework will be developed as part of the overarching Project Charter established for the task force. Coast Guard will consult with stakeholders on the services to which the Marine Services Fees relate, and any proposed changes to the cost and revenue elements of the fees.

COMMITMENT	LEAD
2012-2013	
Establish a Marine Services Fees Task Force comprised of internal Departmental financial, program service delivery and cost recovery subject matter experts.	DG, MS
Develop an overall project charter, and in collaboration with the Treasury Board Secretariat, develop a comprehensive stakeholder consultation plan that meets all the requirements of the *User Fees Act*.	DG, MS
Initiate review of methodology for allocating navigation and icebreaking costs to clients.	DG, MS
Initiate engagement of fee-paying clients.	DG, MS
2013-2014	
Continue to engage fee-paying clients per requirements in the *User Fees Act*.	DG, MS
Finalize methodology for allocating navigation and icebreaking costs to clients	DG, MS
2014-2015	
Table the proposed amendments in both Houses of Parliament, if methodology is approved.	DG, MS

2. ENHANCING BUSINESS MANAGEMENT PRACTICES

STRONGER CANADIAN COAST GUARD IDENTITY

During 2011-2012, government and departmental priorities had an impact on the Canadian Coast Guard's efforts to strengthen its identity

through a national CCG web presence. Updated and more demanding government standards coupled with tighter budget restrictions have realigned the Coast Guard's national projects to focus on making the website, including the Careers pages, accessible to all Canadians regardless of ability.

Major achievements for 2011-2012 included the creation of the CCG 50th Anniversary web presence, the establishment of a national media gallery and an update of all internet content to meet the new accessibility standards.

MODERNIZATION OF THE BUSINESS MANAGEMENT AND RESOURCE ALLOCATION PROCESS

In recent years the Canadian Coast Guard has focused on improving and aligning its resource management functions. In 2011-2012, CCG began a review of it resource allocation process by looking at the Fleet Costing Model which represents almost half of the Agency's budget, and how it is used in the Coast Guard.

Additionally, in 2011-12 CCG added a commitment to its Business Plan to "Assess, modify and initiate implementation of the business management and resource allocation process". This initiative was to examine operations and management salaries and the internal reporting framework, and to identify areas of weakness, duplication and unnecessary process. Due to the diverted limited resources, little work was completed on this project.

However, early findings of the project revealed that a multitude of different internal resource reports exist within CCG, all presenting similar information. As a result of this early work, and as part of this overall initiative, CCG began a review of the suite of resource reports used throughout the Agency with a view to standardizing reporting across regions and functions to the extent possible. This initiative will result in more consistent, accurate and transparent identification of resource allocation and consumption and aid with decision-making at all levels of the Agency.

With the increased pressures resulting from government-wide fiscal restraints and the associated measures put in place, it is paramount that the CCG ensures that its business and resource management framework continues to maximize the impact of those resources. Over the next two years, Coast Guard will implement changes to refine the Fleet Costing Model, and the allocation processes in other parts of the organization. This process will ensure that the limited available resources are allocated, tracked, and reallocated as warranted, to the strategic priorities of the organization.

COMMITMENT	LEAD
2012-2013	
Implementation of new business management and resource allocation process for CCG.	DG, IBMS
2013-2014	
Continue development and implementation of new business management and resource allocation process for CCG	DG, IBMS

SERVICE LEVEL AGREEMENTS WITH DFO CLIENTS

2011-2012 Accomplishments:

SLAs with DFO Oceans and Science and DFO Ecosystems and Fisheries Management

- Completed the 3-year pilot project defining Service Level Agreements with DFO Oceans and Science and DFO Ecosystems and Fisheries Management in 2011-2012.

SLAs with CCG Maritime Services

- Established an agreed upon SLA and developed a Performance Measurement Strategy including indicators, targets, sources of data and responsibility for data collection and reporting.

In 2008-2009, the Canadian Coast Guard developed Service Level Agreements (SLAs) between Fleet and DFO Oceans and Science Sector and DFO Ecosystems and Fisheries Management Sector – Conservation and Protection. From 2009-2010 to 2011-2012, these SLAs were implemented as a pilot project that included the development, testing, and modification of effective performance measures. In 2012-2013 renewed SLAs will be negotiated with these clients for the ongoing provision of Fleet services. CCG already maintains formal service agreements with clients external to the Department (see section 5 on page 98 for more information on our clients and the services provided).

To increase transparency and internal accountability, in 2010-2011 CCG developed an SLA between Fleet and Maritime Services. In 2011-2012 the internal SLA was implemented on a pilot basis in order to formalize the levels of service Fleet provides to Maritime Services (Aids to Navigation, Icebreaking, Search and Rescue, and Environmental Response). The SLA provides Maritime Services the opportunity to define and articulate program requirements to Fleet for service delivery and provides a framework to measure service performance against agreed to expectations.

COMMITMENT	IN RESPONSE TO...	LEAD
2012-2013		
Negotiate renewed Service Level Agreements for the provision of Fleet services to DFO Ecosystems and Oceans Science and DFO Ecosystems and Fisheries Management in close collaboration with these two key clients and the DFO Chief Financial Officer.	AG	DG, Fleet

RISK MANAGEMENT FRAMEWORK FOR CCG'S PROGRAMS /OPERATIONS

2011-2012 Accomplishments:

The previously developed Maritime Services Risk Management Guidelines have been re-established in support of a larger Risk Management Framework with the methodology applied to issues such as MCTS optimum scheduling implementation.

During the 2011-2012 departmental risk management cycle, accountability for managing risks was placed more directly in the hands of the Department's Directors General. By shifting the accountability the intent is to ensure a more direct focus by managers on the management of risk in an integrated way across the sectors and regions. Risk mitigation accountabilities will thus be better clarified and better communicated at the operational level.

As we move forward with this new model during 2012–2013, we will develop a risk management framework and methodology for CCG's maritime services programs and operations to more clearly articulate how risk is addressed in program management and to support decision-making. The framework and methodology will provide a description of the major components of the risk management decision process as well as a process to assist decision-makers in effectively managing risk issues.

COMMITMENT	LEAD
2012-2013	
Complete the risk management framework and methodology for CCG to enhance program management and support decision-making.	DG, MS

3. WORKFORCE MANAGEMENT

The Coast Guard will face new challenges with the release of the 2012 Budget and the implementation of deficit reduction decisions. Our dedicated and professional employees will be expected to maintain service delivery while adapting to the changes. The CCG will continue to invest in its workforce, and more importantly will actively manage this enabling resource. Through CCG's three HR strategies, we will focus on fostering a qualified and representative workforce, developing and supporting people, and demonstrating fair and effective management.

STRATEGY 1 – A QUALIFIED AND REPRESENTATIVE WORKFORCE

2011-2012 ACCOMPLISHMENTS

- Completed detailed syllabi for certificate modules for the two identified requirements, Third Class Engineers and Logistics Officers, as part of the Ships' Crew Certification Program.
- Received over 515,000 visits to the CCG Careers page.
- Achieved compliance with Phase 1 of the Web Content Accessibility Guidelines.

Demographic shifts continue to be a big influence on our workforce as increasing numbers of experienced employees are eligible for retirement; however, given the current environment, staffing efforts will be focused on continuity of employment for CCG employees, while also maintaining recruitment efforts.

The Careers Page

The Internet is the primary tool for employment searches. With the wealth of competition online, CCG needs to stand out in terms of information and presentation. With this in mind, CCG revamped its Careers webpage in 2010 to keep pace with other government departments and the private sector in using the Internet to attract future employees.

Since the launch of the revamped Careers page, viewership has increased six fold. Features such as virtual tours of CCG vessels and the College, videos showcasing CCG services that provide a glimpse into our work and life at sea, and photos of employees at work have helped make the CCG Careers page a best practice for departmental websites in 2010.

In order to continuously improve the site and to maintain high levels of viewership, the Careers page is evaluated using a Google Analytics tool and revised / updated accordingly to ensure its effectiveness. Content is also reviewed and updated to ensure the accuracy of information.

In conjunction with the on-going evaluation and improvement to the Careers page, and as a result of a recent court decision concerning web accessibility, federal government departments are implementing the Standard on Web Accessibility and the Standard of Web Usability for government internet pages. The purpose of the Standards is to make content accessible to a wider range of users, including people with physical and cognitive disabilities, and those using older technologies, adaptive devices or mobile devices. Implementation is being completed in phases; Phase 1, now completed, included all CCG home pages, all new pages published after October 2011 and pages that are most frequently viewed.

Recruitment and Staffing

Demographic changes will be one of the biggest influences on our workforce over the next several years, as increasing numbers of experienced employees retire or pursue careers elsewhere. In previous years, recruitment was promoted to offset pending departures and to assist in succession planning efforts. While recruitment efforts will continue to be monitored and required, CCG will focus on its succession planning and the effective management of its current workforce. A new CCG Staffing Review Process was implemented in 2012 to guide all new staffing requests. For more information on the new process, please see Strategy 3 on page 50.

When forecasting human resources requirements, the length of time it takes to train new employees is taken into account. For example, it takes

approximately 12 months to train new Marine Communications and Traffic Services Officers (MCTS). The national MCTS Officer Trainee (ab-initio) recruitment program, designed for new recruits who have no previous experience in the field, accepts 20 candidates in a typical year and has a graduation rate of approximately 85%.

The length of training time is particularly pertinent for our Ships' Officers, many of whom begin their career at the Coast Guard College. The four-year Officer Training Program involves comprehensive in-class theory, the use of modern marine simulators, and practical experience during sea training. Successful Officers complete the program with entry-level certification (Watchkeeping Mate or 4th Class Marine Engineer). While this program provides both technical and practical training, individuals must accumulate appropriate sea time in order to be eligible to take the exams required for higher certification. It typically takes from eight to ten years to achieve the highest level of certification (Master Mariner or First Class Marine Engineer). Thus, CCG Fleet must not only replace retiring officers, but also replace any certification lost through attrition, making succession planning challenging due to time considerations.

Officer Training Program recruitment activities focus on creating awareness of the Coast Guard College and its programs through strategic advertising investments aimed at under-represented regions, and by targeting designated groups where gaps exist between labour force availability and labour force participation (for example, First Nations communities).

In 2011-2012, the College's officer-cadet intake for the Officer Training Program was 64. The annual intake is tied to the organizational recruitment for ships' officers and is adjusted annually to satisfy workforce needs. For more information, please refer to Section 5, Canadian Coast Guard College.

Student Recruitment and Training

Hiring students benefits CCG, insofar as the access to a pool of educated, motivated and technically proficient short-term employees complements the existing workforce. It enables CCG to deliver crucial services to Canadians, and supports the Public Service Renewal Initiative. The opportunity also benefits students by offering them hands-on work experience to add to their academic skills. Each CCG region currently delivers an Inshore Rescue Boat (IRB) Service, where 136 post-secondary students are trained to respond to mariners in distress. There are 24 IRB stations across the country, strategically positioned in all five regions across Canada in areas of high marine traffic. Each station is equipped with a six to eight metre Fast Rescue Craft. Upon graduation, students can be considered pre-trained personnel who are eligible for entry-level positions at CCG or elsewhere in the Federal Public Service.

However, in the coming months and years, student bridging and hiring may decline due to the need to staff affected indeterminate employees throughout the organization.

Employment Equity (EE)

Employment equity groups — women, persons with disabilities, Aboriginal peoples and visible minorities — remain under-represented in certain areas of the organization, although CCG now employs more members from each of the four designated groups than at any time in the past five years.

EE representation has been challenging due to the operational nature of CCG's work, particularly in the operational and technical occupational categories. A reduction in hiring due to fiscal restraint may make it more difficult to continue to meet EE goals.

In January 2011, DFO launched an EE awareness and self-identification campaign, which helped increase the response rate for self-identification forms from 200 to 1000 forms. As a result, approximately 31% of the CCG workforce has self-identified as members of one or more of the four EE groups, as of April 2011. Representation at CCG is approaching overall availability, which is approximately 32%. The CCG has reduced its employment equity gap by 52% since last year, with increased representation being most evident at the regional level.

In an effort to remove barriers to recruitment within the EE groups, especially of visible minorities, CCG has eliminated the Officer Training Program pre-requisite for second language knowledge for the College beginning with the 2010 fall intake session. Second language training is provided throughout the four-year Officer Training Program, to help ensure graduating officer-cadets develop competence in a second official language.

The CCG successfully fulfilled all of its 2008-2011 Employment Equity Action Plan (EE AP) commitments. The 2011-2014 EE AP was approved in November 2011 and includes two CCG specific goals: to reduce representation shortfalls through targeted recruitment and retention of designated group members and increase the recruitment and retention of Aboriginal people as Ships' Officers on CCG vessels. The CCG will also be expected to participate in corporate activities.

DFO has also begun an employment systems review which, by identifying barriers, will show where further effort is needed to improve representation. These efforts will help CCG continue to be a respectful and welcoming workplace that employs people as diverse and representative as the population we serve.

The Canadian Human Rights Commission undertook an audit of the Department's EE program in 2011. The purpose of the audit, which is a legislated component of the Employment Equity Act, is to ensure that departments are working to identify and eliminate barriers to employment for members of designated groups who are historically under-represented in the public service. The results of the audit showed that DFO/CCG has achieved relatively good EE results and that representation of women, Aboriginal peoples, and persons with disabilities in the workforce is good.

However, improvement is needed to increase representation of members of visible minorities.

Women

CCG has made the most progress in its recruitment of women, by eliminating the representation gap in 2011, reaching a surplus of 5 people, due in part to more accurate workforce availability estimates for seagoing women.

Seafaring has been predominantly a male career. To support women in seagoing careers, CCG Fleet manages an Operational Women's Network (OWN) that provides a privileged forum for communication among seagoing women on an ongoing basis. We will continue efforts to reduce the gap between representation and availability for women and Aboriginal peoples within the Ships' Crew occupational group, particularly those working in a deck or engine room position.

Aboriginal Peoples

The 2006 Census revealed that Canada's Aboriginal population grew by 45% between 1996 and 2006, resulting in higher workforce availability estimates.

Although evident gaps still exist in certain areas of the organization with respect to the representation of Aboriginal Peoples, the CCG has successfully reduced the gap by 7%.

In 2011, the CCG College continued to promote awareness of Coast Guard Training and Career opportunities available to Aboriginal youth through its partnership with the Unama'ki Economic Benefits Office in Cape Breton. The partnership is a pilot project aimed at recruiting Aboriginals into the Coast Guard workforce, which aims to enhance educational and experiential opportunities for First Nations communities by participating in the delivery of the Academic Career Connection Program. The objective of the Program is to improve the competencies of Aboriginal youth in the fields of math, science and English so they will qualify for the Coast Guard Officer Training Program. Presently, five Aboriginal students from the pilot project have applied to the Coast Guard Officer Training Program.

In addition, the College hosted a one-week science camp in the summer of 2011 for grade 9 students from five First Nations communities in Cape Breton. The goal of the science camp is to introduce Aboriginal Youth to the fields of science and technology and to learn about the variety of career opportunities within the Canadian Coast Guard. Exciting initiatives such as the science camp help the College reach out to under-represented groups and showcase what the College and the Coast Guard has to offer the next generation when career decisions are being made.

In 2012, the College will continue to strengthen its Partnership with Cape Breton University by participating to their two senior management Boards, by developing common training needs, and by hosting a national conference.

To learn more about how the CCG College is working with the First Nations Communities, please refer to Section 5, the Canadian Coast Guard College.

COMMITMENT	LEAD
2012-2013	
Implement the Aboriginal Bridging Pilot Project into the Officer Training Program	ED, College
2013-2014	
Evaluate and report on the success of the Aboriginal Bridging Pilot Project for consideration in future recruitment strategies	ED, College

Persons with Disabilities

Adjustments in workforce availability estimates for persons with disabilities have allowed CCG to more accurately assess representation gaps for this group. Although estimates have decreased slightly over the past year, a national gap of 19 people remains, consistent with last year's gap. Persons with disabilities are also the most under-represented group across the organization; however, both the Maritimes and the National Capital Region have eliminated the representation gap for persons with disabilities.

Visible Minorities

The representation gap of visible minorities has been reduced from 42 to 16, with representation at 85% of the estimated availability. While most regions have eliminated representation gaps, the Pacific Region has a gap of 40. Many other regions have successfully eliminated the representation gap for visible minorities. The Maritimes concentrated its efforts on providing information sessions to elementary schools with the largest visible minority presences with an eye to future recruitment needs. Additionally, having the College eliminate the gap will help ensure more reflective representation in the operational and technical categories in future years.

Critical Occupational Groups

Critical occupational groups are defined as essential to our operations, and due to labour market pressures and specialized training and experience requirements, recruitment and retention of these groups can be especially challenging.

Critical occupational groups are annually identified by monitoring projected attrition rates. Over the past several years, CCG's critical occupational groups included Ships' Officers (SO), Ships' Crew (SC), Engineers (EN), Marine Communications and Traffic Services Officers (ROs) and Electronics Technologists (EL). Due to the following extensive recruitment and developmental efforts, ENs, ELs and ROs are no longer considered critical groups for 2012-2013.

Marine Communications and Traffic Services Officers

Marine Communications and Traffic Services (MCTS) Officers are no longer considered a critical occupational group, as recruitment challenges have been eased with the national recruitment process and the establishment of the national pool. The national pool has allowed the MCTS program to draw from a group of pre-qualified candidates to fill its training needs. Attrition rates have also dropped over the last few years including retirement eligibility rates.

Since it is no longer necessary to run a recruitment process every year, the length of time needed for recruiting and training has been shortened. Furthermore, by basing recruitment targets on projected attrition rates, the number of annual recruits is closely matched by the number of departures from the organization.

Marine Electronics Technologists

The CCG has successfully hired many marine electronics technologists into the Marine Electronics Development Program (MELDEV) over the last few years, with 20 new ELs being hired from the national collective staffing process that commenced in 2009. The MELDEV Program provides guidelines on acquiring experience, knowledge, and skills through training assignments and work situations.

Given the success of the recent process and the fact that qualified individuals remain in the pool, CCG no longer considers ELs to be a critical occupational group at the national level. As a next step, the CCG has committed to conducting a workload analysis of ELs to ensure we have the proper number and distribution of ELs across the country.

While the number of qualified individuals graduating from public institutions in some parts of the country is lower than in others, and the recruitment of ELs to work in remote locations may be difficult, these challenges are regionally-based and are not faced at the national level.

The Engineering Community

With an authorized budget of just over $1.4 billion for the procurement of Coast Guard large vessels, and a recognized need for additional investments, shipbuilding is becoming an important departmental activity. As such, the focus of recruitment, mentoring, training and coaching activities, for the next several years, will be on university-trained engineers (naval architects, mechanical engineering, electrical engineering).

Ships' Officers and Ships' Crew

Ships' Officers and Ships' Crew remain critical occupational groups within CCG. To further enhance efficient crewing practices and succession planning, CCG will continue its implementation of the Ships' Crew Certification Program. In 2011-2012, the CCG successfully completed detailed syllabi for certificate modules for the two identified requirements, Third Class Engineers and Logistics Officers, as part of the Ships' Crew Certification Program. In addition to piloting this program in the Quebec Region in 2012-2013, Fleet will also conduct an analysis on additional training opportunities through the use of the Ships' Crew Certification Program in 2013-2014.

COMMITMENT	LEAD
2012-2013	
Pilot the Ships' Crew Certification Program in the Quebec Region for the Third Class Engineer certificate.	DG, Fleet AC, Quebec
2013-2014	
Conduct analysis on additional certificate training opportunities through use of the Ships' Crew Certification Program	DG, Fleet

STRATEGY 2 – DEVELOP AND SUPPORT PEOPLE

2011-2012 ACCOMPLISHMENTS

- Launched a national CCG Orientation Program in spring 2011. CD versions were distributed to regions for seagoing personnel.
- Evaluated the Performance Review System.
- Contributed to achieving a departmental PSES participation rate of 76%.
- Delivered three Continuous Proficiency Training (refresher) courses for MCTS officers. In total, 33 MCTS Officers representing all CCG regions attended the training.

Investments in people are essential if CCG is to deliver programs and services of the highest standard, particularly in times of change. As such, the CCG has placed an added emphasis on the importance of employee career development and progression through regional training initiatives, function specific development programs, second language training, etc. to ensure that the CCG will maintain a skilled and knowledgeable workforce. The CCG recognizes that learning and development extends beyond the classroom to include cost-neutral activities such as job shadowing, mentoring and online training courses.

The CCG also contributes to training future Coast Guard officers through the CCG College. Additionally, the CCG continues to monitor employee performance through the use of the Performance Review System, and to monitor its human resources challenges through the Public Service Employee Survey.

Career and Leadership Development / Employee Training

The Seagoing Personnel Career Development Initiative continues to be an effective means of providing learning, training and leadership opportunities to seagoing employees. The advantages of this program are twofold. Fleet Management benefits onshore from the seafarers technical expertise while seagoing employees gain the increased shore-based management experience required to advance in their careers.

Each ship is equipped with an approved Crewing Standard that is required in order for the vessel to sail (i.e. the certification, training, and experience required for each position needed to crew the ship). Employees in the region, and their training and certification are compared to the Standard in order to identify gaps. These gaps are then used in succession planning to ensure that Fleet resources are used effectively and are presented in the National Seagoing Personnel Training Plan.

The development of a continuous training framework for the Marine Communications and Traffic Services (MCTS) program supports CCG operations. The framework for development includes various initiatives such as the development of competency profiles for operational MCTS Officers, the implementation of the Continuous Proficiency Training (CPT) course, and the continued success of the national MCTS Officer Trainee (ab-initio) recruitment program. As part of the framework, three CPT courses were successfully delivered in 2011-2012 and more courses are scheduled throughout 2012-2013. Additionally, a review

of the development program will commence in 2012-2013 and will continue in 2013-2014 with the development of an action plan to implement the resulting recommendations. For more information on Marine Communications and Traffic Services Technical Training see page 78 in Section 5.

The national Leadership Development Pilot Program was launched in 2007 as a two-year program across five regions, and continued successfully until 2009. In addition to developing leadership skills, the program has given participants broader knowledge of the CCG and its directorates, provided an opportunity to network, and helped participants better understand higher management decision making. The Program was assessed and program criteria to expand it to include the College and the NCR was approved by Management Board; however, it has been decided not to proceed with the expansion of the Program at this time, until the human resources impacts of the 2012-2013 Federal Budget are known.

Programs for Engineers

Studies point to a need for additional engineering capacity within CCG, including university-trained engineers and naval architects, and seagoing and shore-based marine engineers. As such, an Engineering Professional Development Program (EPDP) has been developed to allow for entry level engineer recruits to acquire experience, knowledge and skills through training assignments and work situations. The finalization and approval of the tools and strategies to implement this EPDP will be undertaken during FY 2012-13.

The development of the Professional Development Program for Marine Engineers has been temporarily put aside pending a decision from Treasury Board regarding the classification of a 'Shore-Based Marine Engineer' category. The decision to develop a PDP for Marine Engineers will be re-visited once this ruling is received from Treasury Board. In the meantime, ITS and Fleet are working together using developmental assignments within the current organization and with projects to provide developmental opportunities ashore for mid-level marine engineering officers in the Fleet. In addition, the Vessel Maintenance Management (VMM) project is providing further rotational regional positions to seagoing personnel for developmental opportunities ashore.

As a result of the changes to the CCG organization structure, we will be re-evaluating the commitment to develop and implement the ENG-03 Mentoring & Coaching Program in a future year. The focus of the review will be to look at Coaching & Mentoring in CCG as a whole and not just specifically related to Engineers.

Regional Training Initiatives

Pacific Region

The Pacific Region hosts an annual Professional Development Week, offering a wide range of training programs and courses tailored to the Individual Learning Plans of the Region's staff. Approximately 60 courses will be offered to over 400 staff members in 2012, with offerings ranging from mandatory training, such as Occupational Health and Safety and Helicopter

Slinging, to non-mandatory training, such as Pre-Retirement Planning and Writing Skills for Leaders. Professional Development Week has proven to be a very successful initiative; it is cost effective and appreciated by participating staff.

Maritimes Region
The Maritimes Region implemented a regional training application (database) that will: support transparency and equitable training and development needs of employees; support active participation of employees, supervisors and managers in their learning needs; support implementation of potential Regional Professional Development Week; and, will realize efficiencies in training costs.

Newfoundland & Labrador
The Newfoundland and Labrador Region prepares an annual Developmental Training Plan that provides an opportunity for employees to develop skills to assist them in achieving their career aspirations. It also ensures that there is a group of employees with the skill sets required to meet the future needs of the CCG. The plan includes scholarships for seagoing employees which help address succession planning needs in the Fleet. Developmental Training Plan expenditures are approximately $200,000 annually.

The Canadian Coast Guard College
The Canadian Coast Guard College offers programs in four streams: CCG Officer Training Program (CCGOTP), Marine Communications and Traffic Services (MCTS), Marine Maintenance and Equipment Training, and Rescue, Safety and Environmental Response, including ongoing technical training for seagoing personnel. Since Canada is experiencing a shortage of mariners, delivery of the CCGOTP, one of the core College programs, will continue to be of utmost importance. The College provides future Coast Guard Officers with the knowledge, proficiency and ethos required to adapt and embrace change in a technologically challenging environment.

In 2009, the College developed a Transformation Plan to ensure it can respond to future Coast Guard training requirements. In 2011-2012, it successfully implemented the remainder of the transformation agenda which ensures effective management and administration in the delivery of operational maritime bilingual training.

The College launched its annual training week in the Fall of 2011. Over 220 CCG employees, including Officer Cadets, students in the MCTS ab-initio development program and other federal employees took advantage of 63 courses offered in both official languages. The Canada School of Public Service (CSPS) offered two sessions for new employees to the public service; these were attended by more than 120 individuals.

The College also began developing an operational training governance framework with program partners in Fleet, Maritime Services and Integrated Technical Services in 2011–2012. This governance framework will provide clarity on roles and responsibilities with regard to operational training across the Coast Guard, and will strengthen our capacity to plan and deliver Coast Guard's short and longer term training

needs. College training programs rely heavily on simulation technology which provides students with a realistic yet safe learning environment. Supporting and sustaining this technology and infrastructure are critical to the success of the College training program. Working collaboratively with Integrated Technical Services to establish a life-cycle asset management framework will ensure optimal maintenance of the asset base and training infrastructure.

COMMITMENT	LEAD
2012-2013	
Continue the development of the CCG operational training governance framework.	ED, College; DG, Fleet; DG, ITS; DG, MS
Enhance partnership with Cape Breton University by participating to their two senior management Boards, by developing common training needs, and hosting a national conference.	ED, College
2013-2014	
Continue the development and present a draft of the CCG operational training governance framework for approval.	ED, College; DG, Fleet; DG, ITS; DG, MS

Project Management Community Mentoring Program

For the procurement, refit, and maintenance of Coast Guard's fleet and shore-based assets, Coast Guard needs project managers with extensive expertise in the management of complex and multi-million dollar investment projects. To support the professional development of Coast Guard's senior employees who wish to develop their project management skills, the Integrated Technical Services (ITS) Directorate and Vessel Procurement will implement a Project Management Mentoring Program. The program will support employees who demonstrate an interest in becoming a Deputy Project Manager. It will include structured and monitored project management mentoring, practical exercises, and the opportunity for on-the-job experience by working with a Deputy Project Manager on a current project.

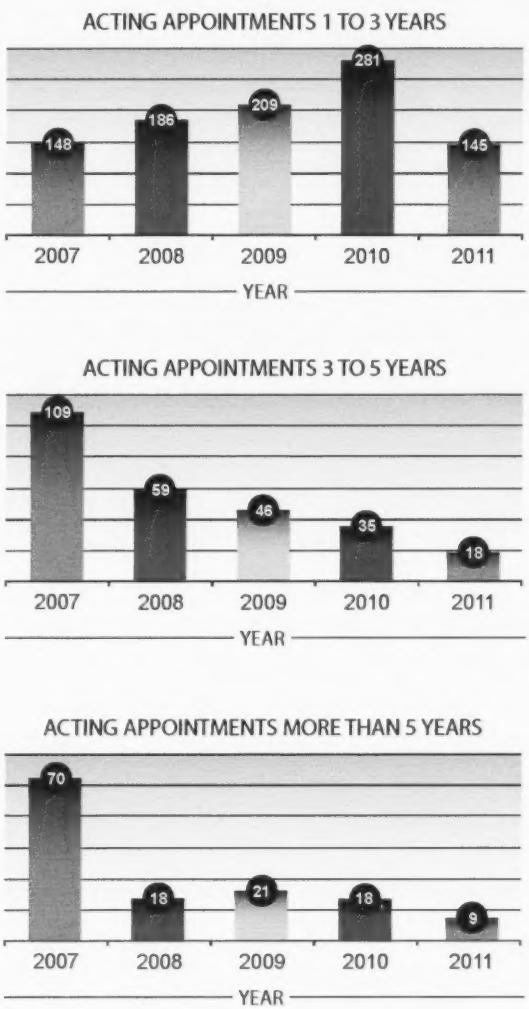
Acting Assignments

Short-term acting assignments can be strategic investments that help prepare employees to participate in competitions for advancement and will ultimately aid in CCG's succession planning by allowing CCG employees to gain knowledge at progressively higher levels.

Long-term acting assignments (greater than 12 months) will be monitored and reported on a quarterly basis. More permanent staffing measures for longer-term vacancies will continue to be encouraged. By encouraging managers to monitor the length of these appointments and to use mechanisms such as rotational acting assignments, it will be possible for a larger number of employees to gain much needed corporate knowledge.

All acting assignments in excess of one year have decreased between 2007 and 2011, particularly from 2010 to 2011. Acting assignments of one to three years has decreased by about 50% since 2010. Acting assignments of three to five years, and those more than five years have also decreased significantly since 2010, dropping by 40% and 50% respectively. **Please see Figure 2 for the breakdowns.**

FIGURE 2: ACTING APPOINTMENTS



Orientation for New Employees

Orientation is an integral part of employee integration and retention in an organization. Coast Guard launched a national Orientation Program for New Employees in 2010–2011. The program was very well received and has helped make new employees feel welcome. By using an online tool that integrates videos, photos and graphics, the program provides an engaging orientation experience and sets the stage for providing new employees with an understanding of the context for their work and how they fit into the organization. To meet the needs of seagoing staff that do not have ready access to internet, the entire Orientation Program was made available on CDs and distributed to the regions.

CCG will continue to promote orientation activities and the use of the CCG Orientation Program as a best practice in the organization.

Official Languages

Coast Guard is committed to fostering an environment that actively promotes the use of both official languages. For example, the CCG has taken the necessary steps to ensure the visibility of both official languages during its 50th anniversary celebrations. In January 2011, the *CCG Framework for Developmental Language Training* was developed in order to provide guidelines for the fair, transparent and equitable management of developmental language training. This Framework recognizes that obtaining and maintaining a second official language is beneficial to the employee and the organization.

Significant effort is expended to ensure that employees meet the language requirements of their positions. According to the 2010-2011 Review on Official Languages, the Canadian Coast Guard invested approximately $175,000 in language training, exclusive of employee salaries, which supported 60 employees. CCG must ensure that it continues to be proactive in creating language training opportunities for individuals who aspire to become future CCG leaders, especially in regions.

CCG will continue to work to meet its *Official Languages Act* obligations to take innovative steps to ensure it embraces Canada's linguistic duality. One such innovation is the integration of second language training into the four-year course of study for Officer Cadets at the Canadian Coast Guard College, which provides them the opportunity to obtain a "BBB" level upon graduation. It had previously been a prerequisite for entry into the Officer Training Program which was considered a barrier to employment equity groups. Additionally, the College offered a 5-week Immersion Program in the summer of 2011 to improve employees' official language competencies. The College also continues to offer "on jase" conversational sessions for employees at the beginner, intermediate and advanced levels. For more information on what the College is doing to promote linguistic duality, please see Section 5, the Canadian Coast Guard College

The 2011-2014 DFO Official Languages Action Plan was approved in November 2011; the Plan outlines the way forward over the next three years in terms of concrete actions

to improve the department's performance and compliance with the *Official Languages Act*. CCG will support DFO in fulfilling all of its Official Language Action Plan commitments.

Employee Training and Development Expenditures

Although CCG invests millions of dollars each year in training, capturing associated costs (i.e. overtime, backfilling, etc.) is difficult and hampers our ability to get a complete picture of training-related expenditures. CCG reviewed training and development expenditures from the past three years to identify trends, shortfalls and changing needs and to provide a better understanding of component costs (tuition fees, disbursements, travel and materials) so that investment baselines and best practices can be established.

In 2011–2012, training and development-related expenditures totalled approximately $6.8 million. On average, this represents $1507 per employee, $430 higher than 2010-2011. These expenditures included travel costs related to training both domestic and international, tuition fees and books, seminars, conferences and cost instructors. In addition, the CCG spent $11.8 million through its College's operating budget in 2011-2012 to satisfy Coast Guard's very specific operational training needs in the areas of search and rescue, environmental response, ice operations, vessel traffic management, marine communications, and electrical and electronic systems maintenance. The College's operating budget will cover the salaries of the officer-cadets, managers, instructors and support staff, as well as costs related to program delivery, campus services, student affairs, training materials, library, computer services, food services, water-front facility, machine shop, etc. Employee training investments combined with College operations totalled $18.6 million.

Efforts to clarify training and development expenditures will continue and transparency in training budgets will be an ongoing management practice. The intended result is improved planning tools that allow managers to create realistic annual budgets and that encourage staff at all levels to make use of training allocations.

Framework for Continuous Learning and Development

CCG has placed an added emphasis on the importance of continuous learning and development, through the Framework for Continuous Learning and Development, to ensure that, as employees depart and arrive in the years ahead, we will maintain a skilled and knowledgeable workforce. The Framework will continue to be reviewed, and any recommendations will be implemented accordingly.

Performance Review System

In 2008, the CCG launched the Performance Review System (PRS). The CCG continues to promote and monitor the PRS and learning plan cycle at mid-year and end-of-year. This is to ensure that the number of employees who receive performance reviews, create work objectives (for shore-based employees), create performance rating factors (for seagoing personnel) and set Individual Learning Plans (ILP) continues to improve.

Approximately 93% of shore-based personnel and 69% of seagoing personnel prepared ILPs for 2011–2012. The operational realities of work at sea and the transition to a new PRS reporting structure affected seagoing completion rates.

In 2010-2011, 95% of shore-based personnel and 54% of seagoing personnel had a performance review discussion with their managers (a significant decline of 23% from the previous year for seagoing personnel). In 2011–2012, 88% of shore-based employees have identified work objectives and discussed them with their manager, a decline of 7% from the previous year. Seagoing employees do not establish work objectives and have an extended PRS cycle due to the operational nature of their work. Although the evaluation period mirrors the shore-based cycle, beginning April 1 and ending on March 31, seagoing personnel have until December 31 to report on the previous year's performance.

In 2011-2012, the CCG conducted an evaluation survey to measure the overall effectiveness of the PRS. The results of the survey were analyzed and used to develop a report with recommendations that was prepared for senior management. An action plan was then developed based on the recommendations to improve the effectiveness of the PRS.

COMMITMENT	LEAD
2012-2013	
Analyze the results of the Performance Review System evaluation and present Action Plan.	DG, IBMS

Public Service Employee Survey

Treasury Board Secretariat launched the 5th Public Service Employee Survey (PSES) in August 2011. The survey is administered by all federal government departments and agencies triennially, with the previous survey having been conducted in 2008.

The PSES provides CCG with important information on demographics, employment-related skills, and career expectations, and provides an opportunity for the organization to better understand its human resources challenges.

Over half of the Coast Guard population (52%) completed the 2011 PSES, in comparison to only 36% in 2008. Overall, the 2011 PSES results are a slight improvement compared to 2008 for all six People Management Drivers (leadership, workforce, workplace, engaged employees, culture of excellence, and sustained, productive public service). Sixty-five per cent of Shore-based employees responded to the 2011 survey in comparison to only 38% of Seagoing personnel. In addition, Shore-based employees responded more positively than Seagoing personnel to all People Management Drivers, by an average of 5% overall.

After assessing the 2011 results, several areas of strengths and areas for improvement were identified. Although CCG has made improvements in the area of leadership, employees continue to look for more direction from senior management. The Agency also had significant improvements from 2008 in the areas of workforce, workplace and employee engagement, particularly in relation to job satisfaction and official languages; however, employees noted that there are not enough career development opportunities.

CCG is committed to acting upon the results of the 2011 PSES and ensuring more open communication among managers, employees and unions by widely disseminating the above CCG PSES results. As shown throughout the 3 HR Strategies, the CCG has already begun to address many of the employees' concerns through concrete initiatives. The CCG will further analyze the 2011 PSES results and will develop a national CCG PSES Action Plan in 2012-2013 to address the challenges and areas for improvement identified in the survey, which will be incorporated into the Departmental Action Plan.

COMMITMENT	LEAD
2012-2013	
Analyze the 2011 PSES results and develop an Action Plan.	CCG MB Members

STRATEGY 3 – FAIR AND EFFECTIVE MANAGEMENT

2011-2012 ACCOMPLISHMENTS

- Established the Workforce Management Board.
- Established the CCG Union / Management Joint WFA Committee.
- Completed 70% transition to Standard Organization.

CCG will continue to focus on fair and effective management practices. During 2011-2012 the Coast Guard established the Workforce Management Board and the CCG Union / Management Joint Work Force Adjustment (WFA) Committee to monitor, review and manage staffing requests and workforce adjustment related activities. Additionally, the CCG will ensure that accurate data is available to better address its human resources challenges.

Workforce Management Board

The CCG Workforce Management Board is an amalgamation of the CCG Human Resources and the Organizational Structure Management Board Sub-Committees. This newly formed Committee will serve as the senior decision-making body for the review and management of all CCG workforce and human resource matters.

Workforce Management Board exercises a unique challenge function of all indeterminate staffing requests (including all workforce adjustments, deployments, discretionary leave without pay, developmental program related appointments and secondments out for more than a year). It provides recommendations to the Commissioner for his final approval,

taking into account CCG's current and future organizational needs. This challenge function also seeks to secure continuity of employment for all CCG indeterminate employees during the implementation of the deficit reduction action plan.

CCG Union / Management Joint Work Force Adjustment (WFA) Committee
To support workforce adjustment related activities, CCG has established a national CCG Union/Management Joint Workforce Adjustment Committee. Membership will be comprised of CCG Management Board and the Bargaining Agents representing Coast Guard employees. The objective is to jointly promote the primary objective of the WFA directive, in order to maximize employment opportunities for indeterminate employees affected by workforce adjustment situations.

Data Integrity
The CCG is facing a number of human resource challenges as a result of changing demographics, an environment of fiscal restraint, an aging population and new vessels that will require people with experience and specific technical competencies. Having workforce data that is accurate and readily available is a critical component in meeting these challenges.

CCG relies on the departmental human resources system (PeopleSoft) for its workforce data to guide decision making on HR management issues. However, data integrity issues with PeopleSoft have been identified in CCG as impacting timely HR management decision making.

In 2012-2013 CCG will undertake a cleanup of CCG PeopleSoft data to ensure that we have accurate and timely HR data at the national, regional and functional level for both seagoing and shore-based personnel. This clean-up will be a collaborative effort to ensure key stakeholders are engaged and consulted from the outset.

Standard Organization
The Standard Organization (SO) was launched in May 2009 in response to the Auditor General's concern with the lack of standardization in the Canadian Coast Guard. Its objective is to ensure that service delivery is standardized, and that employees who do the same work are classified and compensated in the same way, and resources are appropriately distributed among regions.

To ensure a successful transition to the SO structure, various tools were developed and distributed to support managers and employees, including implementation guidelines, classification priorities process, access to the standardized organizational charts, roles and responsibilities and answers to frequently asked questions. The transition toward a standardized organization is on the order of 70%. Current fiscal budgetary reductions will prevent CCG from fully implementing its SO. As such, the affordability of the organization is being reviewed. Progress will continue to be measured and reported on a semi-annual basis through mid-year and year-end reviews of the Business Plan.

DEMOGRAPHICS – Please refer to Annex G

3.1 COAST GUARD'S 50TH ANNIVERSARY

On January 26, 2012 the Canadian Coast Guard celebrated its 50th Anniversary by hosting events at national and regional headquarters offices, various bases and locations across the country, and of course, aboard vessels. Events and activities are planned across the country throughout the year to celebrate the Golden Jubilee by building and strengthening Canadian's awareness of who we are and what we do and honouring the men and women of the Canadian Coast Guard, past and present.

One of Coast Guard's memorable events was the 50th Anniversary Gala, held on Saturday, February 4, 2012, to celebrate and commemorate our 50 years of service, our employees, our alumni and our partners. Coast Guard has developed a calendar of events and activities for 2012 that will allow us to build and strengthen Canadians' awareness of who we are and what we do and to promote our organization's past, present and future role in ensuring Canada's place as a maritime nation.

As part of a year long celebration for the Coast Guard's 50th anniversary, Minister Ashfield announced the new postage stamp featuring the *CCGS Louis S. St-Laurent,* currently the largest icebreaker in our fleet. This ship and its crew are a familiar and reassuring sight for mariners along our eastern and northern coasts. While the *Louis St-Laurent* is close to retirement, its replacement the *Diefenbaker* is currently being built under our government's National Shipbuilding Procurement Strategy.

On March 26, 2012, Commissioner Grégoire attended a national ceremony in the Quebec region as the Bank of Canada unveiled their new $50 polymer bank note. Regional ceremonies also took place across Canada to mark this important event during the Canadian Coast Guard's 50th Anniversary. The bank note highlights Canada's commitment to Arctic research and the development and protection of northern communities. The new bill features the *CCGS Amundsen* – an icebreaker in service on the St. Lawrence as well as an Arctic research vessel that has been a major catalyst in the revitalization of Canadian Arctic science by providing Canadian researchers and their international collaborators with the platform and the tools to facilitate unprecedented access to the Arctic Ocean.

COMMITMENT	LEAD
2012-2013	
Continue the 50th anniversary events across Canada to raise awareness about the services the Coast Guard provides to Canadians.	DC, Operations

REGIONAL PERSPECTIVE

OVERVIEW

CCG operates in five regions. Each CCG region is led by an Assistant Commissioner, who reports to the Commissioner and is responsible for directing the day-to-day delivery of CCG programs and services in that region. While CCG plans at a national level to ensure consistency in the design and delivery of programs, the regions are responsible for program delivery.

While all five regions deliver the core CCG programs, the focus in each region is different, depending on climate, geography, and client needs.[5] For example:

Newfoundland and Labrador Region:
The region covers more than 28,956 km of shoreline and 2.5 million km^2 of continental shelf. The North Atlantic Fisheries Organization (NAFO) Regulatory Zone inside 200 mile limit is 2.3 million km^2. The search and rescue zone extends halfway across the Atlantic and the region has the highest proportion of distress incidents and the largest percentage of SAR cases. The region has approximately 1,100 employees, 18 ships, 75 small craft and three helicopters.

It has a long ice season with ice conditions and weather second only to the Canadian Arctic. The regional headquarters office is located in St. John's. There are five Marine Communications and Traffic Services Centres, more than 1,700 fixed and floating aids to navigation and a fully lighted buoyage system, four long range navigation stations and four differential global positioning system transmitting stations. There are four CCG Stations and three inshore rescue boat stations.

With the largest oil handling port in Canada, a rapidly expanding offshore oil industry and millions of tons of potential polluting cargo and vessel fuel transiting regional waters each year, the region maintains an immediate readiness to act effectively to protect the marine environment.

FOR MORE INFORMATION ABOUT OUR REGIONS, PLEASE REFER TO THEIR WEBSITES:

Newfoundland and Labrador:
http://www.ccg-gcc.gc.ca/newfoundland_labrador_region

Maritimes:
http://www.ccg-gcc.gc.ca/Maritimes-Region

Quebec:
www.marinfo.gc.ca/en/general/accueil.asp

Central and Arctic:
www.ccg-gcc.gc.ca/eng/Central_Arctic/Home

Pacific:
www.ccg-gcc.gc.ca/eng/CCG/Pacific

[5] The CCG Regional and Headquarters structure will change effective October 1, 2012.

Maritimes Region: The region includes 11,439 km of coastline and encompasses three provinces; New Brunswick, Nova Scotia and Prince Edward Island. The region is home to the largest oil refinery in North America, (Canaport in Saint John, NB) and the second and third largest ports in Canada, with respect to tonnage shipped. The region also has the world's highest tides (Bay of Fundy) and the country's first Liquefied Natural Gas (LNG) terminal. The marine economy is the primary economic driver with 300 small craft harbours and approximately 30 commercial ports to support it. The fishing industry, with a landed catch value of approximately $1 billion, is the largest and most valuable in the country, and includes the largest lobster fishery in the world. With the high volume of cargo traffic, the vast majority of which is petroleum products, the risk of a major oil spill remains very high. Unique to the Region is the operation of the Canso Canal.

Quebec Region covers 14,000 km of shoreline along the St. Lawrence, from Montreal to the Atlantic Ocean, including Quebec's Arctic Region (Nunavik). The harsh weather conditions characteristic of the gulf, along with the river's sinuous course, restricted depth and ice cover, make the St. Lawrence one of the world's most difficult to navigate. The marine services provided by Quebec Region are essential to this key waterway that runs between populated banks and fragile ecosystems. Specific to Quebec Region are the management of dredging along 317 km of the shipping channel, the monitoring of ice cover using a remote surveillance system and the use of hovercrafts for flood control.

The St. Lawrence's geographical location makes it a strategic trade route for accessing the interior of the continent. Four major Canadian ports are located in the region and account for nearly 30% of the tonnage of cargo handled, making marine transportation in Quebec Region essential to Canada's economic prosperity. The numerous expansion projects in the mining and oil sectors, the international cruise industry boom as well as the increase in the size and number of the ships passing through the St. Lawrence are testimony to the vitality of the marine sector.

Central and Arctic Region is the largest region geographically, spanning four provinces, two territories, and the Yukon North Slope. The region is home to the majority of pleasure boat owners and recreational fishers in Canada, as well as a significant proportion of commercial shipping. Most of Canada's domestic tonnage is registered and operated out of the region with commerce on the Great Lakes and St. Lawrence Seaway exceeding 180 million metric tonnes per year. Central and Arctic Region, in partnership with the United States Coast Guard and the Royal Canadian Mounted Police, delivers integrated programs on the Great Lakes.

The region's mandate in the Arctic is evolving and expanding given the dramatic changes to the Arctic environment, climate change and sea ice conditions. It is an area of growing focus domestically and globally. Central and Arctic Region plays an operationally critical role through the deployment of icebreakers assigned to Arctic operations, the missions of which play a vital role in Arctic re-supply, the United

Nations Convention on the Law of the Sea (UNCLOS), and joint Government of Canada exercises such as Operation Nanook. Additionally, the region provides a number of specialized services in the Arctic which support the Coast Guard fleet, the Government of Nunavut, commercial carriers, and enhance the safety and efficiency of marine transportation in the Arctic.

The Pacific Region marine community operates 24/7, 365 days a year, from Victoria to the Western Arctic, with nearly one half million vessel movements per year. The region includes 27,000 km of coastlines and 560,000 km^2 of ocean.

Weather can vary dramatically across the British Colombia coast, which is known internationally as one of the world's wildest coastlines. For example, the mouth of the Juan de Fuca Strait, a large body of water about 153 km long, forming the principal outlet for B.C.'s Georgia Strait, has been called the "Graveyard of the Pacific" due to frequent inclement weather conditions in the area.

The region is home to Port Metro Vancouver, the most diversified and fourth largest tonnage port in North America, and a key port for the cruise industry (attracting 663,425 passengers on 199 sailings in 2011; in 2012, 670,000 passengers are expected on 191 sailings). Also located in Pacific Region is the Asia Pacific Gateway and Corridor Initiative, a transportation network facilitating global supply chains between the North American marketplace and the booming economies of Asia.

KEY INITIATIVES
NEWFOUNDLAND AND LABRADOR

Labrador Services

Ongoing production from the Voisey's Bay facility, increased ferry service between Labrador and Newfoundland and efforts to expand the Labrador cruise ship industry signify increased vessel activity along the Labrador Coast. Maritime safety remains a priority for CCG, and the rising activity on the Labrador Coast will place further demands on CCG services. While much of Labrador still requires chart modernization, Canadian Hydrographic Service (CHS) has completed extensive soundings and charts for a corridor through the North Labrador Coast, meaning safer transit for cruise ships. The requirement for aids to navigation, SAR resources and Very High Frequency (VHF) coverage along the Labrador Coast is under review, and the increased demand for CCG services will be monitored and managed closely.

Fishing Vessel Safety

The safety of vessels less than 65 feet participating in the offshore fishery continues to be a priority for CCG and prompted a review which identified important safety matters in the fishing industry. To enhance safety within the growing offshore fishery, CCG will partner with Transport Canada and other industry stakeholders to implement recommendations identified in the Fishing Vessel Safety review. In its role, CCG will endeavour to educate and provide awareness training to fishers, and it will continue to closely monitor its SAR response capability to ensure that resources are optimally allocated and utilized.

North Atlantic Fisheries Organization (NAFO)
As a Special Operating Agency, the CCG provides support to the Department of Fisheries and Oceans through the provision of vessels to facilitate conservation and protection in NAFO waters. Conservation and protection remains a high government and departmental priority, and CCG will continue to work with DFO to ensure patrol vessel surveillance, armed boarding capabilities and a sustained visible presence in Canadian territorial waters.

St. John's Southside Base Replacement
The Southside Base Building in St John's was constructed in the 1960's and houses the majority of shore based employees in the Newfoundland and Labrador (NL) Region. The facility is currently owned by Fisheries & Oceans Real Property, and unlike other regions Newfoundland has only one base of operations.

A feasibility study conducted in 2009 determined that the 46 year old facility was now at a point where many of the building systems were coming to an end of their useful life (mechanical, electrical, communications) and needed upgrading or replacement.

Many changes have taken place since the initial construction of the building and a recent review of CCG's current and future requirements determined that the entire facility needed replacement.

A Peer Review of all Real Property Capital Projects that support the Agency's operations confirmed this project as CCG's highest priority across the country. The project is still in the planning stages with an estimated start date in 2014 and construction to be completed by 2017.

MARITIMES

Base Consolidations

Base Consolidations remain a top priority for the region. Divestiture of the Saint John Base will be completed by June 2012. Portions of the property will be leased from the city in order for the Coast Guard to continue operations. A tender contract for a new Coast Guard facility in Saint John will be finalized in 2012.

The Charlottetown Base has been divested and operations continue at various leased locations throughout the Charlottetown area. A tender process for a new facility will be finalized in 2012.

The new Regional Headquarters building in Dartmouth was completed in 2011. Furnishing, building testing and other fit-up activities were carried out in early 2012. The majority of CCG employees located in the Halifax Regional Municipality have moved to the new building. Buoy operations and other operational activities will be consolidated at the new facility in the summer/fall of 2012, allowing for the divestiture of Dartmouth Base.

Maritime Rescue Sub-Centres/ Joint Rescue Coordination Centres Consolidation Project
CCG Maritimes has been delegated as the national lead for this project, which involves

the consolidation of the Marine Rescue Sub-Centre (MRSC) in St. John's, Newfoundland and the MRSC in Quebec City, Quebec into the Joint Rescue Coordination Centres (JRCC) in Trenton, Ontario and Halifax, Nova Scotia. This project will realize a net annual savings of $1M.

Operational Readiness

The region will ensure we remain operationally ready, by providing safe, reliable, available, and operationally capable ships, helicopters, and supporting infrastructure with competent and professional staff ready to deliver maritime services to Canadians and respond to on-water and marine-related needs.

In support of Fleet Operational Readiness, the Maritimes Region maintains a readiness status for 24 vessels under its management responsibility. Maritimes Region is expecting the delivery of small vessels in support of DFO's conservation and protection and near shore science operations. The region will also be making preparations for the arrival of the first of two new hero class Mid-Shore Patrol Vessels that are expected starting in 2013. Fleet will continue to explore opportunities that will foster relationships with other federal government departments with security mandates and provide them with assets on which to train in support of their responsibilities.

ITS Maritimes Region will continue to support the Coast Guard's Shore-Based Asset Renewal Initiative to ensure that programs such as Aids to Navigation and MCTS communications systems are up to date and provide reliable service to Canadians. We will also continue to improve upon maintenance of assets management for the Coast Guard. CCG has also taken steps to improve the information systems required to deliver more efficient asset maintenance as well as all aspects of life-cycle asset management.

Maritime Services support to operational readiness includes the implementation of MRSC/JRCC consolidation, as well as, improvements of MCTS technologies and services including Automatic Identification System (AIS), Direction Finding (DF), Long-Range Identification and Tracking (LRIT), and Communication and Control System (CCS). Also included is the operationalizing of a new fleet of Pollution Response Vessels (PRVs) and updates to the Environmental Response Area Contingency Plans throughout the region. Maritime Services will work closely with CHS in order to provide near real-time data to mariners obtained through Waterways Management surveys. The region will also implement an instantaneous automated marine security reporting system between the Canso Lock and MSOC (East) and implement e-navigation initiatives, such as supporting Smart Buoys, which will improve safety in Vessel Traffic Services (VTS) zones.

Training and development of our staff remain a key priority for the region. The development of a regional training application ensures that individual learning plans and training requirements are integrated into planning and decision making process. By supporting National initiatives such as the Ship's Crew Certification Program, the MelDev Program,

and the Leadership Development Program, our staff will have the training and learning opportunities to ensure they are always able to respond to operational on-water and marine-related needs.

QUEBEC

Pre-deployment of Annual Lighted Spar Buoys

This initiative is an important step towards the progressive deployment of annual buoyage in a large part of Quebec Region's navigable waters. It was made possible through national funding for research and development. The annual lighted spar buoy is an efficient innovation also of benefit to other CCG Regions.

In 2011–2012, a few annual spars were deployed in the area and are currently under observation. In addition, mooring and removal tests by air cushion vehicles and T-1100 vessels were conclusive.

In 2012–2015, the CCG Quebec Region will analyze observation data and feedback from users and make the required adjustments. Furthermore, lighted annual spar buoys will continue to be deployed based on the funding provided.

Transiting of the post-Panamax[6] type vessels on the St. Lawrence Waterway

As part of the action plan, CCG in cooperation with Transport Canada and pilots will work on items such as guidelines regarding the transiting of post-Panamax type vessels in the St. Lawrence River shipping channel as well as modifications to service delivery methods.

In 2011–2012, taking into consideration feedback from stakeholders, the CCG and Transport Canada drew up guidelines related to the passage of post-Panamax vessels.

As of the spring of 2012, the transit of post-Panamax vessels will be authorized under certain conditions. The Canadian Coast Guard will monitor their passage while ensuring that the rules and guidelines are enforced. We will also continue developing the Monitoring and Identification of Risks Integrated Tool (MIRIT), in addition to training MCTS personnel.

E-navigation Phase II Project

Following the 2011–2012 report on the evaluation of OMC International's dynamic under keel clearance system, the CCG will continue its collaboration with the Port of Montreal and other stakeholders on the e-navigation phase II project.

E-navigation Portal

In connection with the National Web Renewal and e-navigation Portal initiatives, a deployment plan was prepared in 2011–2012 to support the Central and Arctic Region in developing online services. Some services are now online.

In 2012–2013, the Quebec Region will continue to support the Central and Arctic Region in developing online services.

[6] Panamax vessels are those whose dimensions are such that they can fit through the locks of the Panama Canal. Post-Panamax vessels are larger than Panamax vessels, and they therefore cannot fit through the locks of the Panama Canal. These vessels are usually more than 32.2 metres wide.

CENTRAL AND ARCTIC

Mid-Shore Patrol Vessels (MSPV)
With the first of three Mid-Shore Patrol Vessels arriving in late 2012, it is anticipated that all three MSVPs assigned to Central and Arctic (C&A) Region will be operational in 2013. The region will prepare and plan for full operational status of the vessels which will be used by the joint Royal Canadian Mounted Police/ Canadian Coast Guard Marine Security Enforcement Teams to support on-water enforcement and responsiveness along the Great Lakes and St. Lawrence Seaway system. Coast Guard will continue to work with DFO Real Property Directorate to further identify and define shore infrastructure requirements to support operations and winter lay-up of the new Mid-Shore Patrol Vessels.

2012 Operation Nanook
Central and Arctic will fully participate in the 6th Annual Department of National Defence-led Operation Nanook 2012, which will take place in both the High Arctic area of Lancaster Sound and in Hudson Bay in August. Regional participation in Operation Nanook has continued to expand in scope and complexity to include Coast Guard resources from almost every program area. A Coast Guard led major exercise within Operation Nanook will be a response to a marine Search and Rescue incident.

Navigational Areas (NAVAREAS)
On July 1, 2010, Central and Arctic Region, Marine Communications and Traffic Services in Prescott, Ontario, began broadcasting NAVAREA warnings in an "Initial Operational Condition" status. In 2011-2012, the service was in a "Full Operational Condition" status, and NAVAREA warnings were made available on a year-round basis to mariners in Arctic waters through use of the INMARSAT-C satellite service. The focus for 2012-13 will be to procure equipment to support the Global Marine Distress and Safety System (GMDSS), a high frequency radio transmitting functionality in the two new Navigational Areas in the Arctic with full implementation occurring in 2013-14.

E-navigation
With active support of Industry through the Great Lakes Marine Advisory Board Sub-committee on e-navigation, and in partnership with the United States Coast Guard (USCG), United States Army Corps of Engineers (USACE), Environment Canada, Transport Canada, and St. Lawrence Seaway, C&A Region will continue to identify information important to clients and stakeholders, its availability, and improve the accessibility of that information in 2012-13.

Strategic Review Regional Implementation
Central and Arctic Region will continue work on implementation of the amalgamation of the Inuvik/Iqaluit MCTS Centres; the primary focus will be on both the affected employees as well as the purchase and installation of equipment required for the transition from Inuvik to Iqaluit for the 2013-14 navigation season.

Implementation of the Maritime Rescue Sub-Centre Quebec City, Quebec/Joint Rescue Coordination Centre Trenton, Ontario

amalgamation will continue for fiscal year 2012-13. The focus will be on managing the affected employees as well as reconfiguration of the physical space at JRCC Trenton and staffing to required levels to assume full responsibility for the expanded area of operation.

Arctic Aids to Navigation and Charting Sub-Committee
CCG and Canadian Hydrographic Service (CHS) will work closely with Arctic clients and stakeholders to advance the work of this Arctic Marine Advisory Board Sub-Committee in 2012-13 to review and identify the needs for Aids to Navigation and Charting in Canadian Arctic waters; review the aids to navigation provided by CCG and the charts provided by CHS to identify gaps; and examine options and develop recommendations intended to address or diminish service gaps on both a short term and long term basis.

PACIFIC

National Communications Control System
The regional component has not yet been established for this system. Pacific Region has a regional project officer feeding the national project and participates in a regional component for installation when requested.

Casualty Tracking System (CasTrack)
Pacific Region has developed a passenger accountability system, the Casualty Tracking System. The region continues to promote the CasTrack system to local emergency responders in an effort to ensure a more effective response to marine disasters.

In the last year, Pacific Region's SAR program has been actively promoting the CasTrack system through training events, meetings with local emergency response agencies and exercises.

In an exercise at Vancouver International Airport Authority (YVR), CasTrack was featured as the method to track people from a non-secure area through a secure area and back to a non-secure area. In addition to YVR personnel, RCMP members also gained experience with the CasTrack system.

CasTrack was featured as part of the annual Government of Canada Operation Nanook exercise in August 2011. Pacific Region's Rescue Specialist Coordinator attended this event.

As part of an exercise planning meeting, a presentation on CasTrack was made to Canada Line Security (Sky Train) personnel as a means of tracking passengers from a train car through a hazard area to a secure area.

The Vancouver Police Department was provided with a presentation on CasTrack in response to an incident where they needed to track multiple people disembarking a small tour vessel on which an investigation was taking place.

The Marine Disaster Scene Management course has incorporated the CasTrack system into the training and has been delivered at the CCG College, in the regions and in Ottawa. The course has also been delivered to external agencies. Following a presentation by CCG in spring 2011, local Capital Regional District emergency services personnel participated in

a Marine Disaster Scene Management Course in Victoria to gain first hand experience with CasTrack.

Furthermore, all CCG Rescue Specialist courses involve the use of CasTrack during Triage and Mass Casualty training.

An awareness of the CasTrack system is building as a result of these and earlier efforts. In the fall 2011 edition of the U.S. Coast Guard *Journal of Safety and Security at Sea*, the CCG CasTrack system was specifically mentioned as an example of a system that works well.

Implementing a Common Data Format and Standard for Reporting Channel Bottom Condition Information

Pacific Region is collaborating with key regional partners to implement a common data format and standard for reporting channel bottom condition information. This initiative will improve information sharing and distribution between CCG, Public Works and Government Services Canada, Port Metro Vancouver and the Fraser River Pilots.

The region will also be working with CCG Headquarters to ensure the data formats are aligned with Coast Guard's national e-navigation initiative and conform to International Hydrographic Organization and International Maritime Organization standards.

The initiative is progressing as scheduled and the necessary training has been completed. Currently we are developing the required protocols to exchange our information with clients and key stakeholders; and we will be testing a web-enabled environment to ensure the interoperability of our data formats and the compatibility of the new drawing products.

Our reporting structure will be greatly enhanced, with clients and stakeholders better able to make more timely decisions concerning their transit windows and vessel draught in the Fraser River.

Prince Rupert Port Authority

The most significant issue at this time is the potential for further growth in the shipping industry. The Port of Prince Rupert continues to plan for expansion of the container and coal terminals as well as significant expansion of rail capacity to facilitate this growth.

The Enbridge Northern Gateway pipeline project currently under review could increase volume and size of vessels. This will result in an increased demand for aids to navigation.

Marine Navigation Services in Pacific Region will continue to monitor and assess its facilities and equipment in the area to ensure these continue to meet demand and that navigation continues to be properly managed.

5 WHAT WE DO EVERYDAY

This section describes, by Program Activity and Program Sub-Activity, the day-to-day activities related to the programs and services Coast Guard provides to Canadians. It also highlights areas where significant investment is occurring and notes key initiatives aimed at improving the delivery of programs and services.

Note: *The total figures showing in all the tables have been either rounded up or down, therefore reflecting some discrepancies.*

TABLE 1: CCG PLANNED SPENDING BY PROGRAM ACTIVITY, 2012-2013 (THOUSANDS OF DOLLARS)

PAA Activity	Salary	O&M	Total Operating	Major Capital***	Grants and Contributions	Total Planned Spending**
Marine Communications and Traffic Services	34,314	5,798	**40,112**	2,014	-	**42,126**
Marine Navigation	16,477	35,799	**52,276**	-	-	**52,276**
Aids to Navigation	12,381	11,123	**23,504**	-	-	**23,504**
Icebreaking Services	1,049	18,303	**19,352**	-	-	**19,352**
Waterways Management	3,047	6,373	**9,420**	-	-	**9,420**
Search and Rescue Services	11,960	15,887	**27,847**	-	4,921	**32,768**
Environmental Response Services	6,474	2,899	**9,373**	-	-	**9,373**
Maritime Security	3,975	3,388	**7,363**	-	-	**7,363**
Coast Guard College	7,937	3,258	**11,195**	-	-	**11,195**
Fleet Operational Readiness*	184,814	60,779	**245,593**	173,072	-	**418,665**
Shore Based Asset Readiness	51,388	21,265	**72,653**	38,045	-	**110,698**
Total	**317,339**	**149,072**	**466,411**	**213,131**	**4,921**	**684,463**

* O&M includes EFM and EOSS ship refit and fuel funding

** Excludes Vote-Netted Revenue (VNR)

*** Excludes over-programming

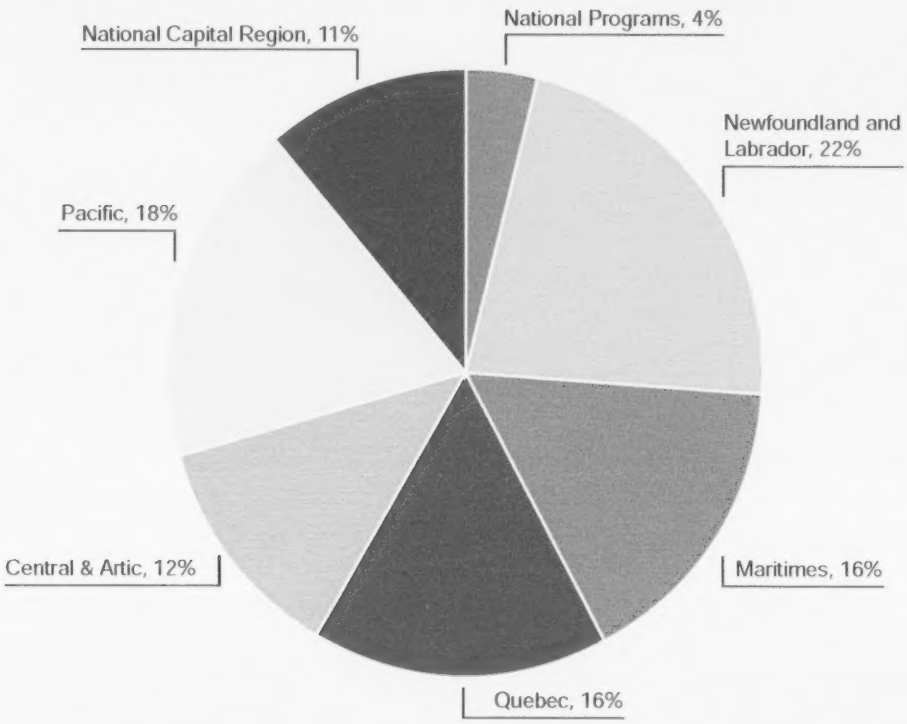
TABLE 2: CCG SERVICE COSTS BY PROGRAM ACTIVITY, 2012-2013 (THOUSANDS OF DOLLARS)

PAA Sub-activity		Allocation of Operating		
	Direct Program Operating	Coast Guard Fleet Operational Readiness	Shore Based Asset Readiness	Total Service Cost (Operating)
Marine Communication and Traffic Services	40,112	1,310	7,666	**49,088**
Marine Navigation	52,276	106,577	43,555	**202,408**
Aids to Navigation	23,504	43,869	26,504	**93,877**
Icebreaking Services	19,352	62,422	16,975	**98,749**
Waterways Management	9,420	286	76	**9,782**
Search and Rescue Services	27,847	75,214	20,065	**123,125**
Environmental Response Services	9,373	832	221	**10,426**
Maritime Security	7,363	4,311	1,146	**12,820**
Coast Guard College	11,195	-	-	**11,195**
Total Coast Guard Program	**148,166**	**188,245**	**72,652**	**409,063**
Non-CCG Program	-	57,348	-	**57,348**
Total	**148,166**	**245,593**	**72,652**	**466,411**

TABLE 3: TOTAL NUMBER OF CCG FULL-TIME EQUIVALENTS (FTEs) - UTILIZATION BY PROGRAM ACTIVITY AND SUB ACTIVITY

	O&M FTEs	Major Capital FTEs	Total FTEs
Marine Communication and Traffic Services	436	-	436
Marine Navigation	257	-	257
Aids to Navigation	210	-	210
Icebreaking Services	14	-	14
Waterways Management	33	-	33
Search and Rescue Services	170	-	170
Environmental Response Services	82	-	82
Maritime Security	44	-	44
Coast Guard College	293	-	293
Fleet Operational Readiness	2,590	194	2,784
Fleet Operational Capability	2,590	-	2,590
Fleet Maintenance		133	133
Fleet Procurement		61	61
Shore-based Asset Readiness	821	-	821
Total	**4,353**	**194**	**4,547**

FIGURE 3: FINANCIAL ALLOCATIONS BY REGION, 2012-2013



MARINE NAVIGATION[7]

2011-2012 Accomplishments

- Initiated the review and update of the methodology for designing and reviewing aids to navigation systems.
- Completed the design and construction of aids to navigation system at Pangnirtung.
- Prepared an action plan and developed mitigation measures that include rules for safe passage of post-Panamax vessels in the St. Lawrence River.
- Amended the Icebreaking Levels of Service following the renewal of the Icebreaker Requirements Agreement.

Marine Navigation provides services that form the cornerstone of Canada's navigation system. The services facilitate efficient and safe movement of maritime traffic through Canadian waters. The services are delivered by three programs: Aids to Navigation, Waterways Management and Icebreaking Services.

The Aids to Navigation program provides devices or systems, external to a vessel, to help mariners determine position and course, to warn of dangers or obstructions, or to mark the location of preferred routes. Collectively known as aids to navigation, they include visual aids (lights, beacons and buoys), aural aids (whistles, horns and bells), radar aids (reflectors and racons) as well as the Differential Global Positioning System.

Navigability in Canadian waterways is highly influenced by water levels and the bottom condition of shipping channels. To help facilitate the efficient and safe use of Canada's waterways, the Waterways Management program is responsible for monitoring and maintaining commercial channels, dredging of the Great Lakes connecting channels and the St. Lawrence River, and for providing water-depth forecasts.

Given the harsh challenges the extremes of Canadian geography and climate bring to maritime traffic, icebreaking services are essential to waters in Eastern Canada and the Great Lakes throughout the winter, as well as during the summer navigation season in the Arctic. Icebreaking services contribute to keeping most Canadian ports open for business year-round and escorting ships in order to travel through ice-infested waters.

[7] In 2012-2013, the DFO Program Activity Architecture (PAA) was modified to encompass Aids to Navigation, Waterways Management and Icebreaking Services under the one activity Marine Navigation.

PERFORMANCE INFORMATION

Marine Navigation Services		
Provides these services...	**Measured this way...**	**With these targets...**
Channel management information	Percentage of Notice to Shipping (NOTSHIPS) on hazardous situations published within CCG's Levels of Service	100%
Dredged channels of the Canadian portions of the Great Lakes connecting Channels and St. Lawrence River	Percentage of channel areas dredged vs. those requiring dredging (Canadian portions of the Great Lakes connecting Channels and St. Lawrence only)	100%
Operational aids to navigation systems	Percentage of time an aid has been operating properly versus time it was expected to be operational (mission time), over a 3 year average	99%
Icebreaking operations (e.g. icebreaking, ice escorts, etc.)	Icebreaking and ice escort response times within CCG's Levels of Service.	97%
Ice related information	Percentage of ice charts requested that are produced	100%

To achieve this result...	**Measured this way...**	**With these targets...**
The commercial shipping industry and mariners are provided with marine navigation support to facilitate access to/movement through main marine channels	Total annual international and domestic tonnage handled	5 year Average (most recent available period)

TABLE 4: MARINE NAVIGATION RESOURCE PROFILE, 2012-2013 (THOUSANDS OF DOLLARS)

Region	Salary	O&M	Total
Newfoundland and Labrador	3,337	7,010	**10,347**
Maritimes	2,027	3,667	**5,694**
Quebec	2,018	6,865	**8,883**
Central & Arctic	1,120	2,832	**3,952**
Pacific	4,188	3,346	**7,534**
National Capital Region	3,786	12,079	**15,865**
Direct Program Total	**16,477**	**35,799**	**52,276**
Coast Guard Fleet Operational Readiness Allocation	80,202	26,376	**106,577**
Shore-Based Asset Readiness Allocation	30,807	12,748	**43,555**
Total Service Cost	**127,485**	**74,923**	**202,408**

AIDS TO NAVIGATION

What we do....

- Design aids to navigation systems;
- Operate a system of floating, fixed, and electronic aids to navigation;
- Monitor the reliability and relevance of the Canadian aids to navigation system; and
- Provide navigation safety information such as the Notices to Mariners and the List of Lights publications.

The Aids to Navigation program is delivered by...

- **CCG Maritime Services staff,** who define and design the aids to navigation system. They manage the service by developing policies, standards, procedures, and guidelines. Through consultations and communication they monitor, evaluate, and improve program performance. In addition, they provide advice, and subject-matter expertise at marine-related intergovernmental and international fora. Maritime Services staff also maintain the CCG's Notices to Mariners website, http://notmar.gc.ca which provides mariners with updated navigation safety information.
- **CCG Aids to Navigation staff,** who are strategically located across Canada and responsible for providing aids to navigation services and navigation safety information to mariners.
- **CCG Fleet,** which is the principal asset used by CCG's Aids to Navigation program to tend and retrieve floating aids to navigation.
- **CCG Integrated Technical Services,** which implements a lifecycle management system to ensure that both our electronic and traditional aids to navigation assets are capable, reliable, and available.
- **DFO Real Property Directorate,** which is responsible for the lifecycle management of some major aids to navigation.
- **Various contractors,** who complement the service work performed by CCG Fleet.

Who we serve...

The Aids to Navigation program's main clients are the shipping industry, recreational boaters, commercial fishers, and pilots, as well as the various associations and committees that represent them. The program generally engages its clients to ensure they understand the program's levels of service, to identify gaps in service delivery, and to foster meaningful exchanges to address user needs while ensuring that expectations are realistic. Client engagement is accomplished through existing media, such as the CCG website, printed media, and various meetings and sessions with regional representatives. The program also engages its clients via various fora, such as meetings of the National and Regional Canadian Marine Advisory Councils, the National and Regional Marine Advisory Boards, the Local Marine Advisory Councils and the Regional Recreational Boating Advisory Councils.

Looking forward...

CCG continues to look at ways to leverage new technology, to ensure the safety of mariners and to consistently meet service standards to its clients. As an example, the program now benefits from a lighting system relying almost exclusively on Light-Emitting Diode (LED) / LED-solar technology. Also, plastic buoys are

LORAN-C

In 2010, the Coast Guard terminated the Loran-C service and, as a result, a project has been initiated for the removal of its infrastructure. Page 107

used where practical which greatly reduces reliance on large vessels for their tending and maintenance costs. We are continuing to find ways to improve the way we deliver and maintain our services, such as the implementation of annual lighted spar buoys that is expected to decrease maintenance requirements while providing mariners with an extension of the lighted service. The program continues to identify and implement continuous improvement initiatives to enhance the Canadian aids to navigation system such as the methodology for the design and review of aids to navigation systems to ensure operations reflect the new technological realities and the needs of today's mariners.

The advent of e-navigation and its many possibilities is also being monitored for possible impacts and opportunities. Among them, the potential of introducing new electronic aids to navigation applications such as virtual aids to navigation to meet the changing needs of our clients appears promising. In an effort to better understand the effectiveness and application of these new types of electronic aids, the program will explore the feasibility of conducting trials to evaluate their effectiveness in a controlled area without compromising the safety of mariners. Furthermore, the program will continue to contribute to the government's effort to conserve and protect the most significant examples of Canadian heritage by supporting the principles of the *Heritage Lighthouse Protection Act*.

TABLE 5: AIDS TO NAVIGATION RESOURCE PROFILE, 2012-2013 (THOUSANDS OF DOLLARS)

Region	Salary	O&M	Total
Newfoundland and Labrador	3,274	3,049	**6,323**
Maritimes	1,059	2,337	**3,396**
Quebec	677	1,329	**2,006**
Central & Arctic	948	1,162	**2,110**
Pacific	3,925	2,135	**6,060**
National Capital Region	2,499	1,110	**3,609**
Direct Program Total	**12,382**	**11,122**	**23,504**
Coast Guard Fleet Operational Readiness Allocation	33,012	10,857	**43,869**
Shore-Based Asset Readiness Allocation	18,747	7,758	**26,504**
Total Service Cost	**64,141**	**29,736**	**93,877**

FIGURE 4: AIDS TO NAVIGATION MAP

Fixed aids to navigation include structures such as lighthouses and sector lights. The chart identifies data as of April 2012.

WATERWAYS MANAGEMENT

What we do....

- Monitor channel bathymetry[8] by surveying commercial channels to identify the bottom conditions, as well as restrictions or hazards to safe navigation, and provide this information to mariners, pilots and other stakeholders;
- Provide water-depth forecasts in the commercial channels in the St. Lawrence, Detroit, St. Clair, Fraser, and Mackenzie Rivers;
- Manage channel dredging in specific areas;
- Maintain marine structures that help manage currents and water levels, wave climates, sedimentation rates and patterns, and scour and erosion. These structures also reduce channel maintenance needs;
- Provide guidelines and analysis on channel design and use, contribute to the international control of water levels in the St. Lawrence River; and
- Operate the Canso Canal.

[8] Bathymetry – the measurement of the depth of bodies of water

The Waterways Management program is delivered by...

- **CCG Maritime Services staff,** who define and design the waterways management program. They manage the service by developing policies, standards, procedures, and guidelines through consultations and communication. They also analyze survey results, calculate water-depth forecasts to inform stakeholders and manage dredging projects. The Waterways Management staff continuously plan, monitor, evaluate, and improve program performance. In addition, they provide advice, guidance and subject-matter expertise through marine-related intergovernmental and international fora.
- **CCG Waterways Management** personnel who provide highly technical expertise on questions related to the safe passage of vessels in Canadian waterways. In particular, they offer mariners underwater information they cannot obtain elsewhere. Waterways management personnel are located in all CCG regional offices, as well as in Headquarters.
- **CCG Integrated Technical Services,** which is responsible for managing the hardware related to MarInfo communication system.
- **Canadian Hydrographic Service (CHS), CCG Fleet,** and **Environment Canada,** which provide services such as conducting bottom-sounding surveys in specific waterways and providing forecasts of water-level depth so mariners can plan safe and efficient passage, and maximize their cargo.
- **DFO Real Property Directorate,** which is responsible for the lifecycle management of marine structures.
- **Public Works and Government Services Canada (PWGSC),** which provides services such as bottom-sounding surveys, dredging, and the disposal of sediments.

Who we serve...

The Waterways Management program's main clients are mariners, pilots, the shipping industry, channel owners and operators, ferry operators, and fishers, as well as the various associations and committees that represent them. The program generally engages with clients to share program vision and direction, identify perceived gaps or existing variations in service delivery, and foster meaningful exchanges to address user needs while ensuring that expectations are realistic. This is accomplished through the existing media, such as the CCG website and various printed media, as well as workshops and information sessions. Clients are also informed through various fora, such as meetings of the National and Regional Canadian Marine Advisory Councils.

Looking Forward...

The Waterways Management program is influenced by the trend to bigger and faster vessels, increasing pressure to maximize water levels and channel depths for optimum loading, climatic change, safety manoeuvring limits, and the need to balance between environmental and economical interests. These issues increase the need to maintain our engineering guidelines for the design,

maintenance and utilization of commercial channels. Users continue to ask for accurate waterways conditions such as water-depth forecasts and channel-bottom information.

In this context, the program needs to be constantly aware of innovations in technologies and management practices that can support more efficient operations. Well-managed partnerships contribute to the efficient coordination of the program's activities and help prevent duplication of activities with internal and external partners such as Public Works and Government Services Canada and Canadian Hydrographic Service (channel-bottom monitoring), and Environment Canada with Canadian Hydrographic Service (available water forecasts).

The Waterways Management program is continually evaluating and integrating new initiatives to improve the information it provides to its clients. For example, the program is deeply involved in the MarInfo project; a marine information portal that provides daily information on St. Lawrence River conditions in Quebec Region, AVADEPTH; a water depth forecasting service for the Fraser River in Pacific Region and in the definition and implementation of e-navigation in Canadian waters. As reported under the "e-navigation" priority in Section 3, (see page 25) the program has worked on a report based on the gap analysis readiness assessment that addresses the e-navigation data sources and services. As well, work continues on the development of a national e-navigation portal.

KEY INITIATIVE

Post-Panamax Study, St. Lawrence River

Given the increase in marine traffic that is widely expected to occur in the near future, Canadian ports are seeking ways to increase their competitiveness. Shipping industry representatives have informed CCG and Transport Canada of their plans to use new-generation post-Panamax[9] vessels, especially on the restricted channel of the St. Lawrence River between Quebec City and Montreal. Post-Panamax vessels do not meet current CCG guidelines for allowing vessels to travel in both directions in some sections of the shipping channel.

At the request of shipping industry representatives, a risk assessment to aid in the decision to authorize wide-beam vessels to navigate the St. Lawrence River up to the port of Montreal was prepared, in partnership with Transport Canada (TC) and the Laurentian Pilotage Authority. In 2010-2011 the risk assessment report was completed and its recommendations were analyzed by CCG and TC. In 2011-2012, an action plan with a view of implementing recommendations from the risk assessment report was completed. As part of the action plan, during 2011-2012, CCG, in cooperation with Transport Canada and pilots, prepared guidelines regarding the transiting of post-Panamax type vessels in the St. Lawrence River shipping channel.

[9] Panamax vessels are those whose dimensions are such that they can fit through the locks of the Panama Canal. Post-Panamax vessels are larger than Panamax vessels, and they therefore cannot fit through the locks of the Panama Canal. These vessels are usually more than 32.2 metres wide.

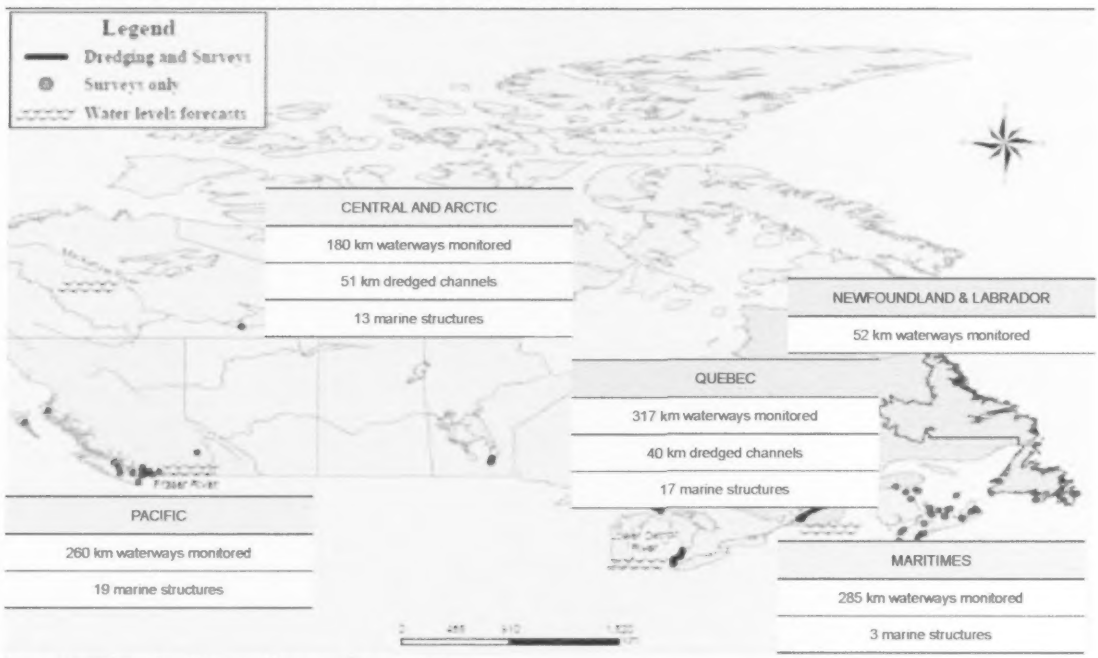
In 2012–2013, the transit of post-Panamax vessels in the St. Lawrence will be authorized under certain conditions. The Coast Guard will monitor their passage and ensure compliance with established guidelines. We will continue developing the Monitoring and Identification of Risks Integrated Tool (MIRIT), in addition to training MCTS staff.

COMMITMENT	LEAD
2012-2013	
Authorize transit and ensure that the directives established for post-Panamax vessels navigating the St. Lawrence are enforced, by tracking the number of transits using the INNAV system and by verifying the rate of conformity to the guidelines.	AC, Quebec DG, MS

TABLE 6: WATERWAYS MANAGEMENT RESOURCE PROFILE, 2012-2013 (THOUSANDS OF DOLLARS)

Region	Salary	O&M	Total
Newfoundland and Labrador	-	35	**35**
Maritimes	877	99	**976**
Quebec	1,123	3,651	**4,774**
Central & Arctic	86	741	**827**
Pacific	263	19	**282**
National Capital Region	698	1,828	**2,526**
Direct Program Total	**3,047**	**6,373**	**9,420**
Coast Guard Fleet Operational Readiness Allocation	215	71	**286**
Shore-Based Asset Readiness Allocation	54	22	**76**
Total Service Cost	**3,316**	**6,466**	**9,782**

FIGURE 5: WATERWAYS MANAGEMENT CHART



Basemap: ESRI, 2009, Data: Waterways Management Program, 2009

ICEBREAKING SERVICES

What we do....

- Provide route assistance, ice-routing advice, and ice information;
- In partnership with the Canadian Ice Service, provide ice information to marine shipping to ensure the safe movement of vessels in the winter season as well as in the Arctic.
- Resupply isolated Northern settlements with food, cargo and fuel when commercial services are not available;
- Manage flood control on the St. Lawrence River through the monitoring, prevention, ice booms and breaking up of ice jams;
- Respond to requests for icebreaking support and break out ice in harbours and ports; and
- Support Arctic sovereignty.

The Icebreaking program is delivered by...

- **CCG Maritime Services staff,** who define and design the icebreaking program. They manage the service by developing policies, standards, procedures, and guidelines. Through consultations and communication, they continuously plan, monitor, evaluate, and improve program performance. In addition, they provide advice, guidance, and subject-matter expertise through marine-related intergovernmental and international fora;
- **Maritime Services Regional Ice Superintendents,** who work in Ice Operations Centres, ensuring that ice information is disseminated to vessels by radio, Internet, fax, etc.; that routes around ice are prepared and distributed to mariners; and that icebreakers are strategically positioned to respond to requests for assistance. Ice Operations Centres are located in St. John's, NL; Dartmouth, NS; Quebec City, QC; and Sarnia, ON;
- **CCG Fleet,** which operates icebreakers in the Arctic between June and November and on the East Coast of Canada, the St. Lawrence River, and the Great Lakes between December and May;
- **CCG Integrated Technical Services,** which maintains ice booms and the integrated ice management system;
- **A partnership agreement with Environment Canada's Canadian Ice Service,** which is administered by Maritimes Services headquarters program staff to provide CCG with essential marine weather and ice information.; and
- **United States Coast Guard under a treaty for joint icebreaking operations on the Great Lakes,** administered by Maritime Services headquarters and regional program staff to maximize icebreaking support capability and effectiveness for both nations.

Who we serve...

The Icebreaking program provides ice information and icebreaking services to clients on ice-covered waters of the Great Lakes, the St. Lawrence River, the East Coast of Canada, and the Arctic. The program's main clients are mariners, including the commercial shipping industry, ferries, fishing vessels, ports, river pilots, ice navigators, shipping agents, and Arctic residents. The program conducts annual pre- and

post-season meetings with its clients to share program vision and direction, identify perceived gaps or existing variations in service delivery, and foster meaningful exchanges to address user needs while ensuring that expectations are realistic. This is achieved through existing media, such as the Canadian Coast Guard website, icebreaking directives, and various printed media. Clients are also informed through various fora, such as the National and Regional Canadian Marine Advisory Councils, and the Arctic Marine Advisory Board.

Looking forward...

Climate change and economic development have led to demands for extended periods of navigation through ice both in southern Canadian waters and in the Arctic. Given the need to maximize resource utilization in both ice operations and ice routing and information services, the program needs to be constantly aware of innovations in technologies and management practices that can support more efficient operations. Quality and readily available ice information is of particular importance to vessels navigating through and around ice-covered waters. Because of the importance of publishing timely information on ice conditions, the program is deeply involved in online services development. Satellite imagery and enhanced marine radars, for example, can support the timely detection and recognition of dangerous ice, thereby enhancing safety and reducing navigation times. We have been working on an Ice Pressure Model research project with an aim to modelling ice pressure in order to avoid critical areas where ships could find themselves beset. As the CCG fleet is aging and becomes less reliable, this sort of information would be of primary importance to help make optimal use of icebreakers, as well as improving ice routing and ice information to mariners.

Key Initiative

Development of Ice Hazard Radar

The program will support Research and Development (R&D) projects that could ultimately result in safer navigation, and particularly in the Arctic where marine traffic is increasing annually. In these waters, mariners do not have the appropriate technical instruments that may help discriminate between first year and more dangerous multi-year ice. The Ice Hazard R&D project that the program is working on, with external partners, has as a main objective to develop such an instrument, a cross-polarized radar, that would have the capacity to make this discrimination. Results obtained in lab tests suggest a very promising future for this project and several countries have already shown their interest, indicating a potential for commercialization.

COMMITMENT	LEAD
2012-2013	
Prepare a report on the Ice Hazard Radar field tests to assist in determining its application on-board vessels.	DG, MS

TABLE 7: ICEBREAKING SERVICES RESOURCE PROFILE, 2012-2013 (THOUSANDS OF DOLLARS)

Region	Salary	O&M	Total
Newfoundland and Labrador	63	3,926	**3,989**
Maritimes	92	1,230	**1,322**
Quebec	218	1,885	**2,103**
Central & Arctic	86	929	**1,015**
Pacific	-	1,192	**1,192**
National Capital Region	590	9,141	**9,731**
Direct Program Total	**1,049**	**18,303**	**19,352**
Coast Guard Fleet Operational Readiness Allocation	46,974	15,448	**62,422**
Shore-Based Asset Readiness Allocation	12,006	4,968	**16,975**
Total Service Cost	**60,029**	**38,720**	**98,749**

MARINE COMMUNICATIONS AND TRAFFIC SERVICES

2011-2012 Accomplishments

- Implemented optimum scheduling at MCTS Centres in March 2012, as part of the workload review recommendations.
- Implemented satellite transmission service of navigational safety information for Arctic NAVAREAs in June 2011.
- Delivered three Continuous Proficiency Training (Refresher) courses for MCTS Officers.

Safety of mariners and environmental protection in Canadian waters is highly dependent on the efficient and timely communication of information. With centres located across Canada, the Marine Communications and Traffic Services (MCTS) program is CCG's communication backbone. By ensuring that an efficient communication system is available 24/7, the program contributes to the safety of life at sea, the protection of the marine environment, the safe and efficient movement of shipping in waterways, maritime domain awareness, and the provision of essential and accurate information to mariners. Its services are essential to deploying Search and Rescue and Environmental Response teams promptly and effectively to maritime crisis situations. MCTS is, in many situations, the only means by which a ship's call for assistance can be heard.

What we do...

- Manage vessel traffic by monitoring vessel movements and providing information services to assist the on-board navigational decision-making process to contribute to mariners' safety and prevent pollution;

- Monitor for distress and emergency calls from vessels, and broadcast maritime safety information to mariners at sea;
- Provide vessel screening to ensure vessels intending to enter Canadian waters request clearance and comply with applicable Canadian regulations;
- Manage an integrated marine traffic information system in support of activities of other government departments, agencies or marine industry including the initiation of the emergency response network;
- Support maritime domain awareness by providing vessel movement information to other government departments and to the CCG component of Marine Security Operations Centres; and
- Provide marine telephone call service on a cost recovery basis.

The Marine Communications and Traffic Services program is delivered by...

- **CCG Maritime Services staff,** who define and design the provision of MCTS by developing policies, standards, guidelines, and procedures. Through consultations and communication, they continuously plan, monitor, evaluate, and improve program performance. They also provide advice, guidance, and subject-matter expertise through marine-related inter-governmental and international fora. In addition, they also maintain the Radio Aids to Marine Navigation (RAMN) publications which provides mariners with updated navigation safety information;
- Approximately 350 certified **MCTS Officers**, who work in 22 MCTS Centres strategically located across Canada, coordinating distress and safety communications and regulating vessel traffic in selected Canadian waters. MCTS Officers also issue and disseminate navigational warnings concerning the operational status of navigational aids and dangers to navigation and report ships of particular interest to authorities. The CCG will consolidate the Inuvik MCTS Centre at the end of the 2012 Arctic navigation season. Commencing with the 2013 Arctic navigation season, all services will be provided remotely by Iqaluit MCTS Centre. This will reduce the number of MCTS Centres to 21;
- **CCG Integrated Technical Services (ITS),** which implements a lifecycle management system to ensure that MCTS equipment, systems and remote radio site facilities are capable, reliable, and available;
- **DFO Real Property Directorate,** which is responsible for the lifecycle management of MCTS Centres;
- **Environment Canada (EC) and Transport Canada (TC),** through Memoranda of Understanding. EC supplies essential marine weather and ice information and TC provides the regulatory regime for Vessel Traffic Services and ship radio requirements; and
- The **United States Coast Guard,** which manages vessel traffic management in the Juan de Fuca Strait (via a treaty), and under a separate arrangement on the Detroit and St. Clair rivers.

Who we serve...

The MCTS program's main clients are mariners - including commercial fishers, recreational boaters, commercial shippers and pilots - and the various associations and committees that represent them. The program generally engages with its clients to promote understanding and to encourage feedback on the services it provides. This is achieved through existing media, such as the CCG website, Notices to Mariners and various printed media. Clients are also informed through various fora, such as meetings of the National and Regional Canadian Marine Advisory Councils, the National and Local Marine Advisory Councils, and the Recreational Boating Advisory Council.

PERFORMANCE INFORMATION

Marine Communications and Traffic Services		
Provides these services...	Measured this way...	With these targets...
Response to calls for assistance from ships	Percentage of calls responded to as per CCG's published Levels of Service (LOS)	100%
Vessel traffic and waterway information in vessel traffic services zones	Percentage of time vessel traffic services are provided to regulated vessels in vessel traffic services zones as per CCG's published LOS	100%
Responses to requests from vessels to enter Canadian waters	Percentage of offshore clearances out of the total number of vessels requesting entrance to Canadian waters from sea	100%
To achieve this result...	Measured this way...	With these targets...
Vessels have the marine communications and traffic services support they need to transit Canadian waters safely	Percentage of total number of collisions, strikings, and groundings out of the total vessel movements within vessel traffic system (VTS) zones	<1%

Looking Forward...

The MCTS program is highly influenced by new technology driven by international fora such as the International Maritime Organization and the International Telecommunication Union; changes in the marine transportation industry, which has seen the introduction of larger and faster vessels; and by heightened security concerns. For example, the introduction of the Automatic Identification System is expected to offer opportunities for increased efficiencies in the delivery of the MCTS program. As the program is highly dependent on good asset condition and life cycle support to ensure continuous operation, the program requires a national Service Level Agreement with Integrated Technical Support to ensure MCTS Levels of Service and standards are met in a cost effective manner.

Key Initiatives

NAVAREAs

NAVAREAs are geographical sea areas established by the International Maritime Organization (IMO) to coordinate the transmission of navigational warnings to mariners at sea. In

October 2007, the IMO confirmed Canada in its role as international coordinator and issuing service for navigational warnings for two NAVAREAs in the Arctic. The broadcasting and coordinating of navigational warnings began, in initial operational capacity, in July 2010 from Prescott MCTS Centre via the INMARSAT SafetyNET satellite service using the English language.

CCG initiated the NAVAREA International SafetyNET satellite transmission service, in full operational capacity, in June 2011. Starting in 2012-2013 the CCG will acquire high-frequency radio transmitting equipment to support the broadcast for the High Arctic (above 76°N). By the start of the 2014 Arctic navigation season, CCG will officially launch high frequency radio transmissions of both meteorological and navigational information in the High Arctic.

COMMITMENT	LEAD
2013-2014	
Launch high frequency radio transmission of both meteorological and navigational information in the High Arctic.	DG, MS AC, C&A
2014-2015	
Develop Treasury Board submission to request ongoing funding for NAVAREAS.	DG, MS AC, C&A

Marine Communications and Traffic Services Technical Training (MCTS)

The development of a continuous training framework for the Marine Communications and Traffic Services (MCTS) program is critical to CCG operations. The framework development includes various initiatives such as the development of competency profiles for operational MCTS Officers, the implementation of the Continuous Proficiency Training (CPT) course and the continued success of the national MCTS Officer Trainee (ab-initio[10]) recruitment program. Work will continue on the framework to ensure the continued support and successful recruitment and certification of MCTS Officers across Canada.

2011-2012 saw the successful delivery of three Continuous Proficiency Training courses and more are scheduled throughout 2012-2013. A review of the MCTS ab-initio development program will commence in 2012-2013 and continue in 2013-2014 with the development of an action plan to implement the resulting recommendations. This review will ensure an up to date and valid training program for the certification of MCTS Officers. (See page 40).

COMMITMENT	LEAD
2012-2013	
Develop a work plan and tools to conduct a needs and gap analysis of the MCTS officer certification and training program.	DG, MS ED, College
2013-2014	
Conduct the needs and gap analysis of the MCTS certification and training program. Develop training objectives and recommendations based on the results.	DG, MS ED, College

Consolidation of the Arctic Marine Communications and Traffic Services Centres

On October 13, 2011, the Government announced the consolidation of the Arctic MCTS Centre in Inuvik, Northwest Territories and Iqaluit, Nunavut into a single MCTS Centre in Iqaluit, Nunavut. With the arrival of the modern Communication Control System (CCS) in 2012, Coast Guard will be able

[10] An ab-initio is a person who is recruited and selected to participate in the *MCTS Officer Training and Certification program* in order to acquire the knowledge and skill requirements of a MCTS Officer.

to consolidate the Arctic MCTS Centres of Inuvik and Iqaluit into one centre to be located in the existing MCTS specific CCG facility in Iqaluit for the 2013 Arctic navigation season. Situated at the eastern approaches to the North West Passage, the Iqaluit MCTS Centre will permit comprehensive management of the growing volume of domestic and international vessel traffic in the Arctic-wide Northern Canada Vessel Traffic Services zone and coordinate all safety related broadcasts and communications using state of the art technology. The consolidation will result in savings in both salary and operating funds, and provide a more focused and enhanced level of service to mariners operating in the north. A Transformation Initiative Steering Committee has been established in order to coordinate both operational and technical issues involved in the consolidation of the two MCTS Centres. The Shore-Based Asset Renewal program will oversee the asset component of the MCTS consolidation plan in the Arctic.

COMMITMENT	LEAD
2012-2013	
Initiate consolidation of the Arctic MCTS Centre in Inuvik, NWT and Iqaluit, Nunavut into a single MCTS Centre in Iqaluit, Nunavut.	AC, C&A
2013-2014	
Complete the consolidation of the Arctic MCTS Centre in Inuvik, NWT and Iqaluit, Nunavut into a single MCTS Centre in Iqaluit, Nunavut.	AC, C&A

FIGURE 6: MCTS CENTRES AND REMOTES SITES IN CANADA

*Note: Inuvik MCTS Centre is scheduled to close at the end of the 2012 Arctic season. After closure CCG will have 21 MCTS Centres.

MCTS Program Continuity and Efficiency

To ensure the continuity of the MCTS program, the CCG MCTS Officer ab-initio training program accepts approximately 20 candidates each year, and ensures they receive standardized up-to-date training. Furthermore, the MCTS program continuously strives for greater efficiency in the delivery of its services. In this regard, MCTS completed a workload review and risk assessment and during 2012-2013 it will focus on implementing workload review recommendations.

COMMITMENT	LEAD
2012-2013	
Implement approved workload review recommendations.	DG, MS

TABLE 8: MARINE COMMUNICATION AND TRAFFIC SERVICES RESOURCE PROFILE, 2012-2013 (THOUSANDS OF DOLLARS)

Region	Salary	O&M	Total
Newfoundland and Labrador	5,719	799	**6,518**
Maritimes	5,460	544	**6,004**
Quebec	6,260	336	**6,597**
Central & Arctic	4,481	1,644	**6,125**
Pacific	8,860	1,591	**10,451**
National Capital Region	3,535	883	**4,418**
Direct Program Total	**34,315**	**5,797**	**40,112**
Coast Guard Fleet Operational Readiness Allocation	986	324	**1,310**
Shore-Based Asset Readiness Allocation	5,422	2,243	**7,666**
Total Service Cost	**40,723**	**8,365**	**49,088**

Reinvestment in the Asset Base

We are making substantial investments in assets related to MCTS. A number of projects are under way, most of which span multiple years. We expect to spend $22.9 million on these projects in 2012-2013 in order to refurbish, modernize, and/or replace the following assets or their components: information and operational systems, communication systems, communication equipment, communication towers and site infrastructure related to these projects.

SEARCH AND RESCUE SERVICES

2011-2012 Accomplishments

- Began the renewal process for the Canadian Coast Guard Auxiliary Contribution Agreements and held discussions on the future direction of the Coast Guard Auxiliary and options for changes to the contribution program;
- Contributed towards the drafting of the Statement of Operational Requirements for the renewal of software system requirements for DND's national SAR case management system;
- Began the planning process for a joint CCG-DND pilot project to provide

Ranger units with enhanced training in maritime search and rescue operations in the Arctic;
- Commenced introduction of a SAR quality assurance approach by completing program audits and exercising in Central and Arctic region;
- Received approval in principle from the Maritime Services Executive Board of a methodology for the new Risk-based Analysis of Maritime Search and Rescue Delivery (RAMSARD); and
- Commenced with the implementation of the Maritime Rescue Sub-Centres (MRSC) consolidation plan into the Joint Rescue Coordination Centres (JRCC) and with the recommendations of the workload analysis.

Canada is a maritime nation bounded by three oceans whose population and economy make significant use of waterways for commercial and recreational purposes. The marine environment can be dangerous and CCG is an important player in responding to emergencies that occur on water.

The federal Search and Rescue (SAR) program is a cooperative effort by federal, provincial and municipal governments. CCG's SAR program leads, delivers, and maintains preparedness for the 5.3 million square kilometre maritime component of the federal SAR system. It does so with the support of multiple stakeholders and partners, including the Canadian Coast Guard Auxiliary and National Defence. Through distress monitoring, communication, and search and rescue activities, the CCG SAR program increases the chances of rescue for people caught in dangerous on-water situations.

What we do…

- Coordinate and manage the response to marine SAR cases, rescuing approximately 3,000 people a year across Canada and supporting the protection of human life at sea;
- Assist the Department of National Defence (DND) with aeronautical and humanitarian cases;
- Operate in-shore rescue boats during the summer season; and
- Manage partnerships, which are essential for the efficient coordination of activities.

The Search and Rescue program is delivered by…

- **CCG Maritime Services staff,** who define and design the SAR system. They manage service provision by developing policies, standards, procedures, and guidelines. Through consultations and communication, they continuously plan, monitor, evaluate, and improve program performance. They also provide advice, guidance, and subject-matter expertise through marine-related intergovernmental and international fora.
- CCG **SAR Mission Coordinators,** who are strategically located in three Joint Rescue Coordination Centres (JRCCs) and two Maritime Rescue Sub-Centres (MRSCs) across Canada. These coordinators provide 24/7 SAR coordination services during distress and safety incidents. The CCG will consolidate the MRSCs into the existing JRCCs during 2012-2013 (page 84).
- CCG **Inshore Rescue Boat (IRB) crews,** who provide a seasonal Inshore Rescue Boat service.

- **CCG Fleet,** which operates a total of 116 vessels, all with SAR responsibilities.
- **DFO Real Property Directorate,** which is responsible for the lifecycle management of lifeboat stations.
- **A partnership with DND,** which is the lead department for the coordination of all aeronautical and marine SAR and is responsible for the three JRCCs. The JRCCs are located in Halifax, Trenton, and Victoria, and they are staffed by both DND and CCG personnel. CCG currently operates two MRSCs, in St. John's and Quebec City, which report to a Joint Rescue Coordination Centre. The CCG will consolidate the MRSCs into the existing JRCCs during 2012-2013 (page 84).
- **A partnership with the CCG Auxiliary,** which consists of some 3,979 members using 1,133 vessels that are either individually-owned boats or community vessels. The Auxiliary responds to approximately one-quarter of all marine SAR cases.

Who we serve...

The SAR program's main clients are mariners — including commercial fishers, recreational boaters, and commercial shippers — and the various associations and committees that represent them. The program generally engages with its clients to promote understanding and encourage feedback on the services CCG provides. This is achieved through existing media, such as the Canadian Coast Guard website and printed media. Clients are also informed through various fora, such as meetings of the Arctic Marine Advisory Board; the National and Local Marine Advisory Councils; the Atlantic, British Columbia, and Canadian Councils of Fisheries and Aquaculture Ministers; and the Recreational Boating Advisory Council. As a committed member of the National SAR Program, CCG also plays an active role in the Inter-departmental Committee on SAR and works with its federal partners to share views among the organizations and their individual clients and stakeholders.

PERFORMANCE INFORMATION

Search and Rescue Services		
To achieve this result...	Measured this way...	With these targets...
Loss of life or injury to mariners in distress is minimized	Percentage of lives saved relative to total reported lives at risk in the maritime environment	≥90%
Search and Rescue Services – Search and Rescue Coordination and Response		
Provides these services...	Measured this way...	With these targets...
CCG Search and Rescue (SAR) responses	Percentage of primary SAR vessels meeting reaction time of 30 minutes or less for maritime incidents	99%
⬇		
To achieve this result...	Measured this way...	With these targets...
People in maritime distress are assisted	Percentage of responses to calls for assistance in proportion to requests	100%

Key Initiatives...

Contribution Agreements with the Canadian Coast Guard Auxiliary

The SAR program has a strong relationship with its volunteer partner organization the Canadian Coast Guard Auxiliary (CCGA) and relies on its response capacity when coordinating response to maritime SAR incidents. Its current contribution agreements with the CCGA will expire on March 31, 2013.

In 2011, CCG began discussions on the future of the CCGA contribution program and evaluated CCGA's financial management practices by undertaking a financial study. In preparation for its renewal, CCG will continue to engage the Auxiliary in discussions on the nature of the partnership, CCGA service delivery and how emerging challenges, such as training costs and recruitment can be addressed.

COMMITMENT	LEAD
2012-2013	
In consultation with the CCGAs, update Contribution Agreements for approval.	DG, MS

SAR Service Delivery in the North

In order to support SAR service delivery in the North, in 2012-2013 the program will be working with its partners in the Department of National Defence to enhance their support and the opportunities to cooperate on maritime SAR in some Arctic communities. A pilot project has been discussed by both organizations and is planned to be undertaken for mid 2012.

COMMITMENT	LEAD
2012-2013	
Run pilot project in the North with SAR partners.	AC, C&A

Search and Rescue Needs Analysis

Since 1976, assessments and analyses of the Search and Rescue (SAR) program's needs and challenges have been conducted periodically. The most recent one was conducted in 2007. The goals of the analysis, which included consultations and preparation of a report on CCG's findings, were to assess the SAR resources needed to respond to incidents in the maritime areas for which Canada has accepted responsibility and to validate the existing Levels of Service or propose changes.

Search and Rescue services are delivered to different service standards across Canada. The SAR needs analysis reviews updates, and assesses all factors (e.g., traffic, meteorological, and incident trends) affecting the existing Levels of Service and the capacity to provide maritime search and rescue services.

In 2011, the program worked with its partners in the Canadian Coast Guard Auxiliary, National Defence and international fora such as the Sub-committee on Radiocommunications and Search and Rescue (COMSAR) and the International Maritime Organization (IMO) decision making body for Search and Rescue in the development of a new methodology for a SAR needs analysis. The new methodology will provide a tool for credible risk-based decisions on the allocation of maritime search and rescue

resources by focusing on both capacity and capability in each designated search and rescue area across Canada. It will be undertaken on a cyclical basis so that each region conducts a review of their SAR areas annually to achieve a complete review of all areas every 5 years.

The capacity of all responders will be evaluated using the framework along with other factors such as volume of traffic, incident types and geophysical conditions. The program will evaluate both the availability and capability of vessels in an area capable of providing search and rescue response and responses to search and rescue incidents. Once the risks are assessed, options to reduce the risks will be assessed based on their costs and benefits, impact on stakeholders and effectiveness in mitigating risks.

COMMITMENT	IN RESPONSE TO...	LEAD
2012-2013		
Implement the framework of the new Risk-based Analysis of Maritime Search and Rescue Delivery.	AG	DG, MS

Search and Rescue Capacity and Capability

In 2011, an evaluation was undertaken of the Coast Guard Search and Rescue Program which focused on the core issues in assessing value for money: relevance and performance, including effectiveness, efficiency and economy. One of the findings was that there is no evidence of a national or regional on-the-water planning exercises standard or approach for the program and that no baseline has been established with regard to the level of exercises to be conducted in a given year. As this is an important component of training and preparing SAR staff for a maritime incident, the program will take steps to put in place new tools to support and report on these exercises. The program will also implement a Management Action Plan to respond to the other recommendations in the program evaluation.

COMMITMENT	LEAD
2012-2013	
Develop and complete year 1 of the Management Action Plan in response to SAR Evaluation.	DG, MS
2013-2014	
Complete year 2 commitments of the SAR Management Action Plan.	DG, MS

Consolidation of Marine Rescue Sub-Centres into Joint Rescue Coordination Centres

On June 6, 2011, the Government announced the consolidation of the Marine Rescue Sub-Centres in St. John's, Newfoundland and Labrador and Québec City, Québec into the existing Joint Rescue Coordination Centres in Halifax, Nova Scotia and Trenton, Ontario. JRCC Halifax will assume SAR coordination responsibilities for MRSC St. John's caseload on April 25, 2012. The project will align maritime search and rescue co-ordination services according to boundaries of responsibility and enhance cooperation by co-locating marine and air search and rescue coordinators in the Joint Rescue Coordination Centres while achieving savings of $1 million annually.

Both Maritimes Region and Central and Arctic Region have implementation teams in place to ensure a successful transition in the coming year. Following recruitment of new coordinators, the regions will focus on training and infrastructure changes to put in place new consolidated centres and ensure the same high quality service continues to be provided without compromising safety.

COMMITMENT	LEAD
2012-2013	
Implement the Budget 2011 decision to consolidate the Marine Rescue Sub-Centres (MRSC) in St. John's and Quebec City into Joint Rescue Coordination Centres (JRCC) in Halifax and Trenton	AC, Maritimes; AC, C&A
2013-2014	
Finalize the consolidation of the Marine Rescue Sub-Centres in St. John's and Quebec City into Joint Rescue Coordination Centres in Halifax and Trenton.	AC, Maritimes; AC, C&A

Canadian Coast Guard Auxiliary

The Canadian Coast Guard Auxiliary (CCGA) is organized into six federally incorporated, not-for-profit volunteer organizations that parallel the five CCG regions, and one national corporation. The Minister of Fisheries and Oceans maintains a formal Contribution Agreement with each of the six CCGA corporations for related costs. The corporations are separate legal entities from the Government of Canada and work in close partnership with CCG.

Canadian mariners have a strong tradition of responding to distress calls from vessels in trouble. Canada's vast and often inhospitable coastline, combined with unpredictable weather, has ensured that these situations are far from uncommon. It is not possible for the Canadian Coast Guard to cover the entire coastline, and for many decades CCG has relied on the volunteers of the Canadian Coast Guard Auxiliary to supplement its response efforts. The CCGA is an integral part of the National SAR program.

Every year, CCGA responds to approximately 21% of all maritime SAR incidents in Canada and is credited with saving approximately 1,000 lives each year. CCGA has approximately 3,979 members and access to approximately 1,133 vessels. Members' local knowledge, maritime experience, seafaring talents and professional conduct make them one of Canada's greatest maritime assets.

PERFORMANCE INFORMATION

Search and Rescue Services – CCG Auxiliary		
Provides these services...	Measured this way...	With these targets...
Signed contribution agreements	Number of trained CCGA members	4,200 (five year average)
↓		
To achieve this result...	Measured this way...	With these targets...
Canadian Coast Guard Auxiliary (CCGA) members are available to respond to maritime Search and Rescue (SAR) incidents	Percentage of maritime SAR response by CCGA relative to the total number of maritime SAR incidents.	20%

TABLE 9: SEARCH AND RESCUE SERVICES RESOURCE PROFILE, 2012-2013 (THOUSANDS OF DOLLARS)

Region	Salary	O&M	Total
Newfoundland and Labrador	852	5,922	**6,774**
Maritimes	2,988	2,140	**5,128**
Quebec	971	2,719	**3,690**
Central & Arctic	2,743	1,868	**4,611**
Pacific	1,819	1,989	**3,808**
National Capital Region	2,586	1,250	**3,836**
Direct Program Total	**11,959**	**15,888**	**27,847**
Coast Guard Fleet Operational Readiness Allocation	56,600	18,614	**75,214**
Shore-Based Asset Readiness Allocation	14,192	5,873	**20,065**
Total Service Cost	**82,751**	**40,374**	**123,125**

ENVIRONMENTAL RESPONSE SERVICES

2011-2012 Accomplishments

- Began the assessment of the CCG ER current response capacity which will form the basis for the development of the national equipment strategy and the CCG Investment Plan.
- Established Environmental Response Training and Exercising Working Groups to develop a national training approach.
- Developed training plans for Arctic communities to utilize the environmental response equipment packages they received.
- Developed a report of integrity assessment that includes the multi-beam survey and the status of the unexploded ordnance for the wreck of the United States Army transport vessel *Brigadier General M. G. Zalinski.*

The Canadian Coast Guard is the lead federal agency to ensure an appropriate response to ship-source and mystery-source spills in Canada's marine environment. Given the amounts of oil and other hazardous materials that are shipped via the marine transportation system, it is critical that the Canadian Coast Guard is ready to respond to marine pollution incidents in Canadian waters to protect coastal communities and Canada's interests. The objectives of the Environmental Response program are to minimize the environmental, socio-economic, and public safety impacts of marine pollution incidents.

An effective response to marine pollution events requires a high level of preparedness, including appropriate resources, strong partnerships, thoughtful contingency planning, and skilled personnel. The marine pollution

response capacity within the Coast Guard is a unique federal capacity not found in other federal departments. Therefore, the Coast Guard may use this unique capacity to support the response mandates of other federal partners such as spills from other sources (e.g. land based spills or offshore platforms) and emergency response events (e.g. Manitoba Floods). In addition, the CCG has mutual aid agreements with other nations, such as the United States Coast Guard and Denmark, which can be utilized in a large scale marine pollution response.

What we do...

- Respond to an average of 1,300 reported marine pollution events per year;
- Ensure the federal government has an appropriate and nationally consistent level of preparedness and response to ship sourced spills in Canadian waters;
- Monitor and investigate all reported marine pollution incidents in Canada and ensure an appropriate response:
  - Where the polluter has been identified and is willing and able to respond, the Coast Guard advises the polluter of its responsibilities and, once satisfied with the polluter's intentions/plans, monitors the polluter's response and provides advice and guidance as required.
  - In cases where the polluter is unknown, unwilling, or unable to respond, the program assumes the overall management of the incident.
- Promote a "whole of government" approach to preparing for and responding to marine pollution events in Canadian waters through the Interdepartmental Committee on Marine Pollution and by liaising with the program's regulatory and policy leads and operational partners, including Transport Canada, Environment Canada and Public Safety Canada;
- Ensure Environmental Response program personnel are trained and exercised to function under a nationally consistent emergency management system that deploys assets and resources appropriately and is capable of rapid and systemic escalation of responses in all regions of Canada; and
- Submit claims to polluters and/or the Ship-source Oil Pollution Fund for costs and expenses where the Canadian Coast Guard acted as On-Scene Commander or Federal Monitoring Officer for response to marine pollution incidents.

The Environmental Response program is delivered by...

- **CCG Maritime Services staff,** who define and design the overall Environmental Response program. They manage the program by developing policies, standards, procedures, and guidelines to promote the delivery of a nationally consistent service. Through consultations and communication, they continuously plan, monitor, evaluate, and improve program performance. They also provide advice, guidance and subject-matter expertise through marine-related intergovernmental and international fora. For example, the Coast Guard is Canada's Competent Authority for marine pollution at the International Maritime Organization;
- **CCG Environmental Response personnel,** who have extensive expertise identifying,

analyzing, developing, and executing the preparedness and response activities essential to minimizing the environmental impacts of marine pollution events;

- **CCG Fleet,** which operates CCG's vessels in support of Environmental Response operations;
- Other **DFO sectors,** including Ecosystems and Fisheries Management, and Ecosystems and Oceans Science, which provide essential scientific information and advice critical for the CCG to ensure an appropriate response to a spill;
- **Environment Canada (EC), Transport Canada (TC) and Public Safety Canada,** EC provides environmental and scientific advice during a response to a marine pollution incident and provides advice in the development and maintenance of contingency plans. In addition, EC ensures regulatory enforcement and compliance under the *Fisheries Act* and other statutes. TC provides the regulatory framework for *Canada's Marine Oil Spill Preparedness and Response Regime,* provides technical advice with respect to vessels, and ensures enforcement and compliance with various regulations. Public Safety Canada is responsible for setting the national framework for emergency preparedness in Canada, through the Federal Emergency Response Plan and the Marine Events Response Protocol. CCG works with Public Safety Canada to ensure interoperability and overall preparedness of Canada to respond to marine pollution events;
- **Response organizations,** which may assist polluters in their response; CCG monitors this response; and
- **Foreign governments,** through bilateral agreements, Memoranda of Understanding, and contingency plans that ensure all available resources can be used to mitigate the effects of pollution.

Who we serve...

Given its role of ensuring an appropriate response to ship-source and mystery-source pollution spills in Canadian waters, the primary client for the program is the Canadian public in general, followed by the shipping industry, Transport Canada, Environment Canada, and other federal and provincial government departments and agencies that have environmental or emergency jurisdiction. The program generally engages with its clients to inform them of their roles and responsibilities and to promote understanding, as well as to encourage feedback on the services provided. The program also consults its clients on its service levels. This is achieved through various media, such as the CCG website and printed media; as well as through various fora, such as the Interdepartmental Marine Pollution Committee, National and Regional Canadian Marine Advisory Councils, Regional Advisory Councils and the National Advisory Council associated with *Canada's Marine Oil Spill Preparedness and Response Regime;* and various workshops, conferences, and exercises at Regional, National and International levels.

PERFORMANCE INFORMATION

Environmental Response Services		
Provides these services...	Measured this way...	With these targets...
Responses to reported cases of ship-source marine pollution	Percentage of marine pollution responses with trained personnel, strategically placed equipment, and a mobilization plan	80%
Responses to ship-source marine pollution threats	Percentage of response actions that meets incident response plan objectives	100%

To achieve this result...	Measured this way...	With these targets...
Environmental, economic, and public safety impacts of marine pollution events are mitigated	Percentage of reported cases in which the response was appropriate relative to the pollutant, threat and impact	100%

Looking Forward...

Strengthening the program's focus on preparedness and planning and working more closely with its federal partners to promote a whole of government approach to marine pollution will be key priorities for CCG in the coming years, as previously mentioned under the "Environmental Response" priority in Section 3 (page 27). In addition, the following key initiatives will be undertaken within the Environmental Response program in 2012-2013:

Key Initiatives

Enhanced Cost Recovery

The *Marine Liability Act* provides the authority for the Canadian Coast Guard to recover all reasonable costs associated with monitoring and/or responding to pollution incidents in Canadian waters. In 2012-2013 the Canadian Coast Guard will strengthen its cost recovery practices related to Environmental Response activities ensuring it maximizes the administrative cost recovery flexibilities provided to CCG under the *Marine Liability Act* and its Special Operating Agency status.

COMMITMENT	LEAD
2012-2013	
Improve the Canadian Coast Guard's cost recovery practices associated with monitoring and responding to marine pollution incidents in Canadian waters and report on recovered funds.	DG, MS

National Equipment Strategy

In 2011-2012, Coast Guard began an assessment of its environmental response capacity using the national standards under which Canada's certified Response Organization are held. The results of this project will inform both a National Equipment Strategy and the CCG Investment Plan. In addition to finalizing the Environmental Response Capacity Review (section 3, page 25), in 2012-2013 we will develop the National ER Equipment Strategy. The Capacity Review and National Equipment Strategy will guide the acquisition of Environmental Response equipment, and ensure consistent life-cycle and material management of Environmental Response assets.

COMMITMENT	LEAD
2012-2013	
Develop a National Equipment Strategy which will include a life cycle and materiel management approach.	DG, MS

Nationally Consistent Training

Building on the progress made by the ER Training and Exercising Working Group established last year, a draft training plan will be submitted for approval to the ER National Management Team in 2012 with the goal to establishing a national approach to ER training.

COMMITMENT	LEAD
2012-2013	
Establish a national approach to environmental response training which will include a national training plan.	DG, MS

Training for Arctic Communities

CCG will implement training plans for the Arctic communities that received environmental response packages funded through the Health of the Ocean initiative in Budget 2007 to enable them to safely and effectively utilize the equipment in the event of a marine pollution incident.

COMMITMENT	LEAD
2012-2013	
Develop a delivery strategy for Environmental Response training and exercises in Arctic Communities.	AC, C&A
2013-2014	
Start the implementation of the strategy for Environment Response training and exercises in Arctic Communities.	AC, C&A

TABLE 10: ENVIRONMENTAL RESPONSE SERVICES RESOURCE PROFILE, 2012-2013 (THOUSANDS OF DOLLARS)

Region	Salary	O&M	Total
Newfoundland and Labrador	1,019	407	**1,426**
Maritimes	1,069	273	**1,342**
Quebec	830	536	**1,366**
Central & Arctic	1,329	609	**1,938**
Pacific	1,011	331	**1,342**
National Capital Region	1,215	744	**1,959**
Direct Program Total	**6,473**	**2,900**	**9,373**
Coast Guard Fleet Operational Readiness Allocation	626	206	**832**
Shore-Based Asset Readiness Allocation	157	65	**221**
Total Service Cost	**7,256**	**3,170**	**10,427**

Reinvestment in the Asset Base

Environmental Response Services expects to initiate a $50.6 million, multi-year project in 2012-2013 to refurbish, modernize, and/or replace marine pollution response equipment to meet current and future operational capacity requirements of the Federal government.

MARITIME SECURITY

2011-2012 Accomplishments

- Reviewed enforcement roles for the Coast Guard;
- Developed a Maritime Security Communications Strategy and initiated implementation;
- Established Terrestrial AIS test site in the Arctic (Resolute Bay); and
- Provided financial support to developing countries to assist them in meeting their international LRIT obligations.

Canadians and foreign trading partners expect Canada to have a secure maritime transportation system. To this end, the Canadian Coast Guard (CCG) leverages its capabilities, including extensive vessel identification and tracking systems, on-water capabilities and maritime expertise, to make significant contributions to national and maritime security.

Security is not a new activity for the Canadian Coast Guard. The Fleet has a long history of supporting enforcement activities of National Defence, the Royal Canadian Mounted Police and other federal departments. Fleet personnel have also long been engaged in supporting fisheries enforcement activities and continue in this role today. Following 9/11, however, the Coast Guard's security role has been expanded.

The past five years have seen the establishment of dedicated CCG resources in on-going maritime security and national security programs. The joint RCMP/CCG Marine Security Enforcement Teams in the Great Lakes and St. Lawrence area and a permanent CCG presence in the multi-agency Marine Security Operations Centres (MSOCs) represent an evolution for CCG investments in maritime security - from simply enhancing CCG safety-based activities (which provide a subsequent maritime security benefit for partners) to making direct investments in on-going inter-agency maritime security activities.

In the last year, CCG has achieved a 24/7 presence in all three MSOCs and is able to support its interdepartmental partners in the MSOCs when and as required. CCG representatives in the MSOCs have also provided its partners with continuous data and value added analysis in support of operations as well as vessels of interest on all three oceans and the Great Lakes.

What we do...

In support of national security, Coast Guard:

- Supports on-water enforcement and responsiveness by providing well-equipped crews and vessels both on a program basis (as in the case of the joint RCMP/CCG Marine Security Enforcement Teams) and on a contingency event basis (as in the case of the 2010 G8 and G20 meetings);
- Provides valuable vessel identification and tracking information to other federal departments to enhance Canada's awareness of activities in its maritime domain. The

Long Range Identification and Tracking (LRIT) system and the Automatic Identification System (AIS) are deemed by our partners to be critical to the enhancement of Canada's maritime domain awareness;

- Provides crucial analyses of the movements of foreign and domestic vessels as a core partner in the two coastal inter-agency Marine Security Operations Centres (MSOCs), led by National Defence, and the inter-agency Great Lakes – St. Lawrence Seaway MSOC, led by the RCMP;
- Offers, as a key member of the maritime security community, operational and strategic support to its partners through various interdepartmental fora, such as the Interdepartmental Marine Security Working Group, led by Transport Canada; and
- Established the Maritime Security Branch which provides leadership and management of the national and maritime security file within the CCG and the Department of Fisheries and Oceans (DFO). The Branch works with internal partners – including CCG Headquarters and Regional Fleet, Maritime Services and Integrated Technical Services colleagues, as well as with DFO's Conservation and Protection representatives - to assess DFO's ability to enhance its contribution to national security.

PERFORMANCE INFORMATION

Maritime Security		
Provides these services...	**Measured this way...**	**With these targets...**
Vessel traffic information	Percentage availability of the Long Range Identification and Tracking (LRIT) system and the Automatic Identification System (AIS).	99.7%
To achieve this result...	**Measured this way...**	**With these targets...**
Federal enforcement and intelligence communities have adequate support and information to enhance their awareness of vessel movements and respond to on-water incidents	Percentage availability of the DFO consolidated maritime picture versus advertised level of availability for clients.	99.7%

Looking Forward...

The Canadian Coast Guard will continue to position itself as a value-added solution provider, working with the federal enforcement and intelligence communities in the pursuit of enhanced national maritime security. In the on-going climate of federal budgetary restraint, it is envisioned that partners will be seeking additional support from the Coast Guard in meeting their national security objectives. We will continue to assess how the organization can build on its considerable maritime experience in order to proactively support its partners and further enhance national security.

It is clear, for example, that Arctic security and sovereignty are federal priorities. The Canadian Coast Guard, as the main federal operational presence in Arctic waters, can offer solutions to its federal partners to address security gaps in these waters. In 2011-12, the Coast Guard worked with federal security partners to explore options by which its role could be enhanced in enforcing Canadian laws and protecting national security. CCG has also begun to establish AIS coverage in key Arctic passages. As well, the LRIT system is fully utilized to track vessels approaching or travelling within our Arctic waters.

Internationally, the Coast Guard will continue its vital and important work in support of global maritime security objectives. It will continue to have a strong voice on security within such influential bodies as the International Maritime Organization and it will share its expertise with these organizations. As a leading proponent of LRIT, the Coast Guard will continue to work to promote the adoption and utilization of this critical vessel tracking system by all maritime nations, thereby enhancing maritime security globally.

Key Initiatives

Integrating Human Resources

In 2011-12, the Maritime Security Branch developed a Human Resources (HR) and Succession Plan. This document takes into consideration the activities and priorities of the Branch and identifies several important aspects of HR management including carrying out a gap analysis, examining HR capacity, establishing HR priorities and creating an action plan to address these gaps. Additionally, in order to mitigate a second language capacity gap and to attain an appropriate level of service to all regions, the Branch will be examining a strategy for second language training for the Marine Security Operations Centres. Over the next 2 years the Branch will implement and monitor the results of this plan. The plan will be reviewed and updated in 2013-14.

Marine Security Enforcement Team

A key aspect of our increased role in supporting the federal maritime security agenda is the ongoing participation in the joint RCMP/CCG Marine Security Enforcement Team (MSET) program in the St. Lawrence – Great Lakes region. The program characterizes Canada's multi-agency approach to maritime security by leveraging existing departmental capabilities to collectively and efficiently achieve a national security objective.

There are four interim MSET vessels that will be replaced over the next two years with the commissioning of 4 new Mid-Shore Patrol Vessels (MSPV), the first of which continues to be on time for delivery in 2012. The new MPSVs will provide the joint CCG/RCMP MSET program with a more robust on-water capability when compared to the interim vessels presently used.

Additionally, the CCG and RCMP have created an MSET steering committee to ensure that the MSET program is delivered in an effective and efficient manner and assures that the program meets the requirements placed upon it by the Government of Canada.

Law Enforcement Familiarization Training continues to be provided on an annual basis to all crew members in support of law enforcement operations. We will also continue to work with RCMP and DFO Conservation and Protection personnel to identify the hazards inherent in on-water enforcement operations. This will allow us to review and adjust our procedures and practices to ensure the greatest safety possible for CCG personnel and partner agencies.

Marine Security Operations Centres
DFO and CCG proactively participate in the multi-departmental Marine Security Operations Centres (MSOC) initiatives, with the Department of National Defence leading this initiative on the coasts and the RCMP providing the leadership in the St. Lawrence Seaway - Great Lakes (GL-SLS) area. CCG contributes significant data on maritime traffic, including associated on-water activities and analyzes this data to support and enhance maritime domain awareness on Canada's three coasts and in the GL-SLS area.

With staffing of the CCG component of the MSOCs at 95% and with a 24/7 presence, the introduction of standardized procedures was critical for staff and allowed a more uniform level of service to our interdepartmental partners within the MSOCs. In a similar fashion, MSOC staff in Headquarters worked with the operational staff in the Centres to identify the high level operational requirements for the various tools needed to address the work of the CCG and DFO component of the MSOC. The finalized Statement of Operational Requirements describes the elements of the tool(s) that will allow the MSOCs to collate DFO and CCG information, analyze this data and enable the performance management strategy for the MSOC capability.

This past year has also seen CCG provide increased support to both RCMP and National Defence MSOC project teams to advance the development of the overall MSOC capability across departments. CCG is actively participating with the RCMP to solidify the foundational documents for the GL-SLS MSOC capability. With the DND-led Coastal MSOC project, CCG has been supporting the development of the Capability Management Organization (CMO). The CMO will provide on-going support to the MSOC capability once full operational capacity is achieved in 2013-14.

In 2012-2013, CCG will continue to support the efforts of both the RCMP and DND to advance MSOC capability development. CCG will also continue to add to its National Standard Operating Procedures (SOP) manual in consultation with its partners and stakeholders. The focus in 2012-2013 will shift to developing Memoranda of Understanding (MOU) or Service Level Agreements (SLAs) with partners and stakeholders to support the MSOC SOPs. Concurrently, CCG will start implementing the essential software support tool sets for both the CCG and DFO components of the MSOCs as identified in the Statement of Operational Requirements as resources allow and in accordance with larger information strategy construct as defined in the Enterprise Architecture initiative. As such, we will leverage work that has been completed in other areas of

CCG such as the Common Operating Picture developed by Fleet. This work will carry on into 2013-2014.

Automatic Identification System (AIS)
AIS is a vessel tracking system that automatically provides updates on vessel positions and other relevant ship voyage data to marine traffic operators. The purpose of AIS is to enhance Coast Guard's ability to identify and monitor maritime traffic in near real-time with accurate and detailed information, allowing for an enhanced awareness of vessels approaching and operating in Canadian waters. In addition to the safety benefits of collisions avoidance and being aware of vessel traffic, there is also a collateral benefit of providing vessel traffic data to the maritime security enforcement and intelligence communities.

AIS shore infrastructure has been integrated within Marine Communications and Traffic Services (MCTS) Centres resulting in 19 MCTS Centres and over 114 remote sites being fitted with AIS systems. In addition to managing shipping traffic in general, MCTS will provide an AIS data feed to other government departments such as National Defence, as well as to the MSOCs on both coasts and in the Great Lakes.

To further improve both maritime safety and security, CCG examined the potential for establishing additional terrestrial AIS test sites in the Arctic. CCG has completed an AIS installation in Resolute Bay and will start work shortly on a second installation in Iqaluit. Completion of this second installation and full testing of these sites will be completed once the 2012-2013 shipping season re-opens.

COMMITMENT	LEAD
2012-2013	
Implement remaining Arctic AIS test site.	DG, ITS

Long Range Identification and Tracking System (LRIT)
LRIT is an integral part of the International Maritime Organization's (IMO) efforts to further enhance maritime security. Using satellite technology, LRIT allows for the tracking of SOLAS (International Convention for the Safety of Life at Sea) class vessels entering or transiting Canadian waters and of Canadian SOLAS class vessels operating internationally. CCG continues to lead the implementation of the international LRIT system and is working with national and international partners to ensure the long-term sustainability of this important vessel tracking system.

Furthermore, CCG continues to provide financial assistance to a number of developing countries in a capacity-building effort to establish their respective LRIT Data Centres. As the international lead for LRIT at IMO, Canada has been asked by the IMO and developing countries to assist them technically and financially to meet international LRIT obligations. By providing this assistance to the developing world, CCG supports the improvement of global maritime domain awareness.

With LRIT, Canada is able to identify and track approximately 800 additional ships a day. This data significantly enhances Canada's maritime domain awareness and is shared with partners in the Canadian security, enforcement, and intelligence communities. LRIT is also being used by CCG to successfully track foreign flag vessels engaged in Arctic voyages.

CCG is also examining other purposes for this tool with a variety of partners within DFO for environmental purposes. These could include risk analysis for ship-based oil spills and shipping density analysis around Canada's marine protected areas. LRIT also benefits search and rescue by identifying vessels of opportunity in the area of a vessel in distress.

TABLE 11: MARITIME SECURITY RESOURCE PROFILE, 2012-2013 (THOUSANDS OF DOLLARS)

Region	Salary	O&M	Total
Newfoundland and Labrador	-	908	**908**
Maritimes	-	284	**284**
Quebec	162	433	**596**
Central & Arctic	-	208	**208**
Pacific	-	276	**276**
National Capital Region	3,813	1,278	**5,091**
Direct Program Total	**3,975**	**3,388**	**7,363**
Coast Guard Fleet Operational Readiness Allocation	3,244	1,067	**4,311**
Shore-Based Asset Readiness Allocation	811	336	**1,146**
Total Service Cost	**8,030**	**4,791**	**12,820**

FLEET OPERATIONAL READINESS

2011-2012 Accomplishments

- Operationalized and supported receipt of three Cape Class SAR 47-foot motor Lifeboats
- Implemented the Operational Women's Network (OWN).
- Developed detailed syllabi for certificate modules for Third Class Engineers certificates and Logistics Officer designation, as part of the Ships' Crew Certification Program.

The Canadian Coast Guard (CCG) Fleet Operational Readiness (FOR) Program provides safe, reliable, available, and operationally capable vessels, air cushion vehicles, helicopters, and small craft with competent and professional crews ready to respond to on-water and maritime related requirements. This program involves fleet management and operations, fleet maintenance, and fleet asset procurement. Through the Fleet Operational Readiness program, the CCG Agency ensures that the Government of Canada's civilian fleet meets the current and emerging needs and priorities of Canadians and the Government of Canada.

The FOR program supports Coast Guard programs, the Ecosystems and Oceans Science and Ecosystem and Fisheries Management activities of Fisheries and Oceans Canada, and the activities of a number of other government departments needing on-water delivery in support of their mandates. The Canadian Coast Guard College is an important contributor to the delivery of this program. Legal basis and authority for this program and capability is found in the *Constitution Act, 1867* and the *Oceans Act.*

The FOR program is comprised of three program sub-activities: Fleet Operational Capability, Fleet Maintenance, and Fleet Procurement.

What we do...

Procure, operate and maintain Canada's civilian fleet of vessels and ensure CCG's fleet is in a ready-state to deliver programs and provide operationally capable ships, helicopters and personnel for about 30,000 operational days per year to:

- Deliver on-water CCG services related to search and rescue, maritime security, environmental response, icebreaking, flood control, aids to navigation and waterways management;
- Respond to federal maritime priorities and natural or man-made emergencies as a key player in various activities mandated under the Federal Emergency Response Plan;
- Support DFO science activities and the conservation and protection of fishery resources; and
- Support the on-water, non-military needs of other government departments (OGDs).

The Fleet Operational Readiness program is delivered by...

- **CCG Fleet,** made up of approximately 2,400 Ships' Crew and Ships' Officers who deliver services aboard the Coast Guard's 116 vessels and operational experts in each region who plan and coordinate the tasking and deployment of vessels and determine fleet needs based on client demand;
- **CCG Integrated Technical Services,** comprised of technical experts who maintain CCG vessels and ensure their compliance to marine transportation regulations;
- **CCG Vessel Procurement sector,** which plans, manages, verifies, and accepts design and construction of new large and small vessels, air cushion vehicles, helicopters, and small craft consistent with CCG's operational requirements as identified in the Fleet Renewal Plan and the Integrated Investment Plan;
- **The National Coordination Centre (NCC),** at Headquarters in Ottawa, which provides centralized coordination of fleet activities as needed;
- **Regional Operations Centres (ROC)** that coordinates the tasking and deployment of vessels in each of the five regions;
- **Transport Canada pilots Aircraft Services Directorate** which manages, maintains and operates CCG's fleet of 22 helicopters; and
- **DFO Real Property Directorate,** which is responsible for the lifecycle management of some shore-based facilities related to the program.

Who We Serve...

In general, Fleet Operational Readiness ensures that the required vessels, helicopters and maritime professionals are provided to meet the evolving needs of the Government of Canada and Canadians. In particular, Fleet Operational Readiness provides essential platforms for the delivery of:

- **CCG Programs** — Search and Rescue, Maritime Security, Environmental Response, Icebreaking, Aids to Navigation, Waterways Management, and Marine Communications and Traffic Services. As seen in Figure 7, these services make up the majority of vessel operational days among the full fleet;
- **DFO Ecosystems and Oceans Science Sector (OSS)** — Requirements for the 2012-2013 at-Sea Science Program include 2, 818 operational days of vessel time and over 200 hours of helicopter time to OSS. While science-related activities are conducted on many of our multi-tasked vessels, 16 of the fleet's 116 vessels are dedicated to the scientific endeavours of the DFO at-Sea Science Program;
- **DFO Ecosystems and Fisheries Management (EFM)** — Conservation and Protection (C&P) Requirements for the 2012-2013 C&P program include 4,086 operational days of vessel time and over 240 hours of helicopter time. EFM – C&P activities supported by the Coast Guard include Northwest Atlantic Fisheries Organization (NAFO) patrols, support to the annual seal harvest, and fisheries enforcement; and
- **Other Government Departments (OGDs)** — Requirements to support the on-water needs of OGDs for 2012-2013 include 556 operational days of vessel time and over 700 hours of helicopter time to government clients. These include Environment Canada, Natural Resources Canada, the Natural Sciences and Engineering Research Council of Canada for additional science-related activities, the Department of National Defence and the Royal Canadian Mounted Police. A distinction has been made between at-Sea Science and external Science clients, such as National Centre for Arctic Aquatic Research Excellence, that have now been included under this category of OGDs. In previous years all science-related missions were included with at-Sea Science.

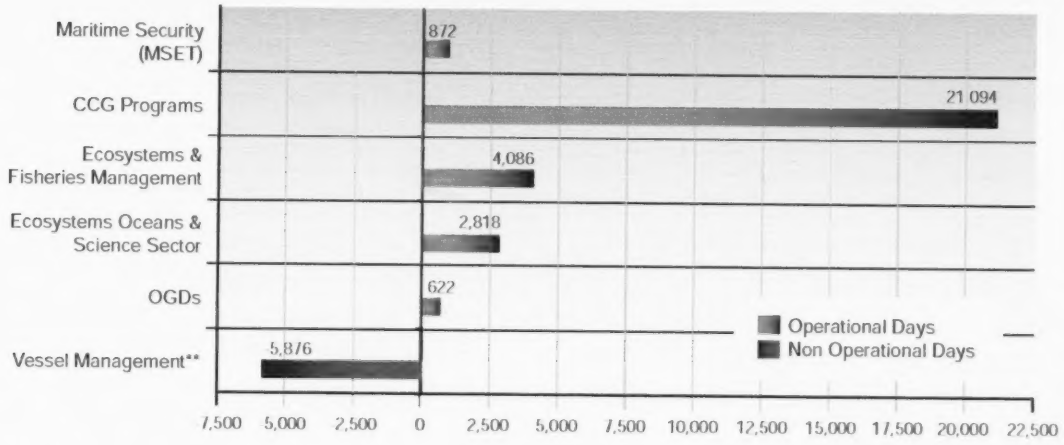
PERFORMANCE INFORMATION

Coast Guard Fleet Operational Readiness		
To achieve this result...	Measured this way...	With these targets...
An operationally capable fleet that responds to the needs and requirements of the Government of Canada	Percentage of client mission completion against client-approved planned	90%
	Percentage of operational days lost due to breakdowns	3%

TABLE 12: FLEET OPERATIONAL READINESS RESOURCE PROFILE, 2012-2013 (THOUSANDS OF DOLLARS)

Region	Salary	O&M	Total
Newfoundland and Labrador	48,820	18,042	**66,862**
Maritimes	35,352	10,013	**45,364**
Quebec	30,803	9,438	**40,241**
Central & Arctic	22,588	6,755	**29,343**
Pacific	38,034	12,044	**50,078**
National Capital Region	9,217	4,488	**13,705**
Direct Program Total	**184,814**	**60,779**	**245,593**

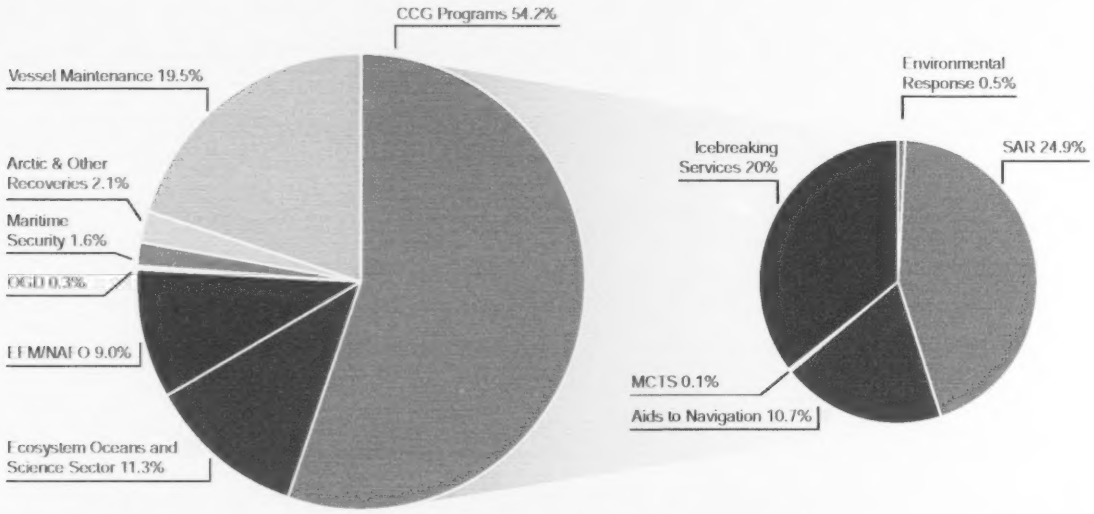
FIGURE 7: PLANNED SERVICE BY PROGRAM 2012-2013 (IN OPERATIONAL DAYS* AND NON-OPERATIONAL DAYS**)



* All or part of a pre-determined 24 hour period (a day) where the vessel is available to deliver service to a client – excluding scheduled maintenance, refit or lay-up.

** The number of operational days unavailable to clients due to Fleet management requirements (regular maintenance, refit, drydock refit, vessel life extensions or mid-life modernizations, transit to/from refit, vessel non-operational mobilization/demobilization and familiarization of new vessels. Lay up is excluded.)

FIGURE 8: DISTRIBUTION OF PLANNED VESSEL COSTS BY CLIENT 2012-2013



- Arctic & Other Recoveries includes a portion of costs that have been estimated to be accurate based on the knowledge and data at the time of publication.
- New vessel operationalization costs are excluded from the distribution of vessel costs.
- Planned vessel costs exclude $2.4M for Amundsen extended refit requirements above FEB approved business case. Possible funding will be pending in-year expenditure monitoring.
- Costs in CCG Programs from Executive direction for Amundsen's participation in April 2012 IPY conference in Montreal are included.
- The transfer of identified telecommunication requirements from CCG Fleet to Shared Services Canada has been reflected.
- Waterways Management/Dredging costs are distributed between CCG, EOS and St. Lawrence Seaway Authority (Other recoveries).

FIGURE 9: NATIONAL DISTRIBUTION OF VESSELS AND HELICOPTERS - 2012-2013

Looking Forward...

In light of the risks it faces, one of Coast Guard's strategic priorities will be the renewal of its assets. This will include continuing our efforts for the procurement of new and replacement vessels, improving asset maintenance, advancing the CCG long-term strategy for Fleet renewal and supporting the implementation of the National Shipbuilding Procurement Strategy.

FLEET OPERATIONAL CAPABILITY

The Fleet Operational Capability program sub-activity includes fleet operations, fleet management and the provision of fleet personnel. This program ensures that certificated professionals safely, effectively, and efficiently operate vessels, air cushion vehicles, helicopters, and small craft that are ready to respond to the Government of Canada's on-water and marine related needs. Activities associated with the Fleet Operational Capability Program are guided by a number of international conventions and domestic marine-related regulations.

PERFORMANCE INFORMATION

Coast Guard Fleet Operational Capability		
Provides these services...	**Measured this way...**	**With these targets...**
Operational vessels, Air Cushion Vehicles, helicopters, and small craft	Number of operational days planned vs. available	see note*

To achieve this result...	**Measured this way...**	**With these targets...**
An operationally capable fleet that has the capacity to respond to the current operational needs and requirements of the Government of Canada	Number of operational days delivered vs. planned.	see note*

* Performance will be reported in the 2012-13 Departmental Performance Report and targets will be developed for the 2013-14 Reports on Plans and Priorities

Key Initiatives

Operationalizing New and Replacement Vessels

Operationalizing a vessel comprises all of the activities that must take place in the short period of time between delivery from the shipyard to the start of program delivery. It includes such things as transit to its home region, crew familiarization, pre-sailing exercises to respond to routine and emergency situations, fitting the vessel with stores and equipment not provided by the contractor, shore-support familiarization and client and partner exercises.

COMMITMENT	LEAD
2012-2013	
Establish the process to bring new vessels to service.	DG, Fleet

Ongoing Improvements in Fleet Management

To sustain an operationally ready fleet capable of meeting service demands, Fleet management will continue to pursue internal efficiencies to optimize national consistency, organizational effectiveness, and linkages with regions and clients. From the client service perspective, the Coast Guard fleet will continue to examine how it conducts business and negotiate renewed Service Level Agreements with DFO Ecosystems and Oceans Science and DFO Ecosystems and Fisheries Management (Section 3, page 34). Internally, it will review and update its lifeboat station guidelines to establish standards for the modernization of these facilities, and operationalize a Fleet Safety and Security Manual Modernization initiative with an eye on ensuring future harmonization with shore-based safety management system. While we have no control over the volatility in fuel prices, Fleet will review current fuel management and purchasing strategies to establish and implement best practices with the aim of reducing fuel cost.

COMMITMENT	LEAD
2012-2013	
Review and update lifeboat station guidelines.	DG, Fleet
Operationalize Fleet Safety and Security Manual Modernization to streamline the safety management system and lessen the administrative burden on CCG vessels.	DG, Fleet

Human Resources Initiatives

Seagoing personnel (Ships' Officers, Ships' Crew, Hovercraft Pilots and Engineers) represent approximately 51% of the total CCG workforce. Shipboard occupations and the related operational environment experienced by mariners are quite distinct from those encountered by CCG's shore-based personnel. Fleet's 24/7 operations require the use of different crewing systems based on variations of hourly averaging, where employees work approximately 40 hours per week. Ships remain at sea for extended periods of time; the work is demanding and is often performed under difficult physical conditions. Additionally, while seafaring has been predominantly a male career, Coast Guard is focusing efforts on recruiting more women into seagoing positions. It also manages an Operational Women's Network for current female seagoing personnel to share information and experiences in a privileged forum.

As a matter of ongoing management and continuous improvement, CCG will continue to build upon its framework of crewing principles for CCG vessels. This will continue to be based on two overarching principles: ensuring a consistent national approach to crewing across the country, and ensuring that CCG vessel class crewing evaluations are aligned with internal, national and international safety, security and labour practices.

In addition, to further enhance efficient crewing practices and succession planning, CCG will continue its implementation of the Ships' Crew Certification Program, which provides incentives to qualified Ships' Crew to aspire to positions as Ships' Officers, thereby contributing to more effective succession plans for seagoing personnel.

FLEET MAINTENANCE

The Fleet Maintenance Program includes the management and delivery of maintenance services during the operational lives of the vessels, air cushioned vehicles, helicopters and small craft in order to ensure their availability and reliability to deliver fleet services. The Fleet Maintenance sub-activity ensures availability and reliability of vessels through the provision of life-cycle investment planning, engineering, maintenance and disposal services. The Canadian Coast Guard College is an important contributor to the delivery of this program. As required, this activity is delivered in coordination with Public Works and Government Services Canada (PWGSC). Activities associated with Fleet maintenance and refit are guided by a number of international and national trade agreements, legal instruments such as the *Financial Administration Act* and Government Contract Regulations, as well as policies, directives, and guidelines provided by Treasury Board, Treasury Board Secretariat, Industry Canada and PWGSC. Fundamental authority for building fleet capability is found in the *Constitution Act, 1867* and the *Oceans Act.*

PERFORMANCE INFORMATION

Coast Guard Fleet Maintenance		
Provides these services...	**Measured this way...**	**With these targets...**
Maintained vessels and Air Cushioned Vehicles	Percentage of critical maintenance milestones achieved versus planned	95%
To achieve this result...	**Measured this way...**	**With these targets...**
A reliable fleet that responds to the operational needs and requirements of the Government of Canada	Condition rating[11] for the fleet of large vessels remains within acceptable risk tolerance for reliability, availability and maintainability	64.4
	Condition rating for the fleet of large vessels remains within acceptable risk tolerance for reliability, availability and maintainability	65.8

Key Initiatives

Improved Maintenance of the Existing Fleet

For details related to improved maintenance of the existing fleet please refer to the Improve Asset Maintenance priority on page 23.

FLEET PROCUREMENT

The Fleet Procurement program sub-activity manages the acquisition of new large and small vessels, air cushioned vehicles, helicopters, and small craft for the Department of Fisheries and Oceans. The program provides project management support to ensure effective and efficient management of project scope, schedule, cost and quality, as well as human resources and communications. The Fleet Procurement Program is delivered by the Vessel Procurement sector and Integrated Technical Services, in collaboration with Public Works and Government Services Canada.

For details on vessel procurement activities please refer to Coast Guard's Fleet Renewal Initiatives on page 18.

PERFORMANCE INFORMATION

Coast Guard Fleet Maintenance		
Provides these services...	**Measured this way...**	**With these targets...**
New large vessels, air cushion vehicles, helicopters, and small craft	Percentage of vessels, Air Cushion Vehicles, helicopters and small craft delivered versus planned	100%
To achieve this result...	**Measured this way...**	**With these targets...**
A modern fleet that responds to the operational needs and requirements of the Government of Canada.	Remaining Operational Life for Large Vessels	50%
	Remaining Operational Life for Small Vessels	50%
	Remaining Operational Life for Helicopters	50%

[11] Through the Vessel Condition Survey program, Canadian Coast Guard (CCG) determines the condition of a vessel through an actual physical examination of each vessel resulting in a vessel condition score or rating. The target condition score/rating represents the acceptable tolerance for reliability, availability and maintainability against which the aggregate of the actual vessel condition survey results are measured.

Reinvestment in the Fleet Asset Base

In recent federal budgets, the Government of Canada has committed $6.8 billion for the procurement of new vessels and helicopters for the Canadian Coast Guard, as well as work related to repairing and refitting existing vessels. The procurement of new vessels and helicopters will enable the Canadian Coast Guard to be more adaptable and capable to meet the Government of Canada's on-water and maritime priorities. Reinvestment in the Fleet Asset Base will take place within the context of the National Shipbuilding Procurement Strategy.

SHORE-BASED ASSET READINESS

The CCG Shore-based Asset Readiness (SBAR) program ensures CCG's non-fleet assets are available and reliable to support delivery of CCG programs. These non-fleet assets include both fixed and floating aids, such as visual aids (e.g. fixed aids and buoys), aural aids (e.g. whistles and bells), radar aids (e.g. reflectors and beacons) and long-range marine aids, namely the Differential Global Positioning System (DGPS) as well as electronic communication and navigation systems and over 300 radio towers. The Shore-based Asset Readiness program ensures availability and reliability of these assets through provision of life-cycle asset management activities such as investment planning, engineering, acquisition, maintenance and disposal services.

What we do...

- Provide partner/client programs with advice and recommendations about the procurement and maintenance of program assets;
- Prepare engineering drawings and specifications, acquire necessary assets or services, and build and/ or install approved technical solutions;
- Conduct the predictive, preventative and corrective maintenance actions required to preserve or restore the operating capability and reliability of assets, systems, and equipment; and
- Ensure the economical, safe, and environmentally responsible disposal of assets, systems and equipment.

The Shore-based Asset Readiness program is delivered by...

- **CCG Integrated Technical Services (ITS)** - Engineers, technicians, technologists, trades people, managers, and support staff located in over 70 workshops and offices across the five CCG regions and National Headquarters work to ensure that CCG shore- based assets are available and reliable to support CCG programs such as Aids to Navigation and Marine Communications and Traffic Services.

Who we serve...

The SBAR Program serves primarily Maritime Services Directorate within the CCG in support of its Marine Communications and Traffic

Services and Aids to Navigation programs but also provides asset management services to DFO Science and DFO Conservation and Protection, as well as providing ship radio inspections on behalf of Transport Canada as part of the regulatory framework of the *Canada Shipping Act*.

PERFORMANCE INFORMATION

Shore-based Asset Readiness		
Provides these services...	**Measured this way...**	**With these targets...**
Maintained shore-based assets	Percentage of service level agreement commitments met to maintain Marine Communication and Traffic Services' Program assets	90%
	Percentage of service level agreement commitments met to maintain Aids to Navigation Program assets	90%
To achieve this result...	**Measured this way...**	**With these targets...**
Reliable shore-based assets ready to respond to the operational needs and priorities of the Government of Canada	Condition rating for MCTS program assets remains within acceptable risk tolerance for reliability, availability and maintainability	Target to be established during FY 2012/13
	Condition rating for Aids to Navigation program assets remains within acceptable risk tolerance for reliability, availability and maintainability	Target to be established during FY 2012/13

Looking Forward...

Looking ahead, the program will focus on determining the priority of sites based on requirements for program delivery for Aids to Navigation and MCTS. As well, the program will focus on improving its internal management processes and tools for program planning, performance monitoring, and performance improvements by implementing the program's Performance Measurement Strategy, a key DFO priority for advancing management and operational excellence.

Key Initiatives

The key initiatives under the Shore-based Asset Readiness Program are divided into two categories; Asset Management Services (AMS) and Program Business Management (see page 22 for details on the Shore-Based Asset Renewal Plan). The first category relates to the ongoing engineering and asset maintenance services delivered to CCG partners and other government departments to ensure their program assets are available and reliable, and the second, to the use of information to guide investment decisions.

Asset Management Services

Communication Control System (CCS)

CCG's current Communication Control System (CCS), in use for over 20 years, has become obsolete. The CCS is the central piece of telecommunications equipment that

provides shore to ship and ship to shore marine communications. The system is mission critical for the purpose of Radio Aids to Marine Navigation at all MCTS Centres and contributes to the safety of vessels in Canadian waters. The CCS project will see the replacement of existing equipment in all MCTS Centres and remote sites across the country as part of the assets' life cycle management process.

COMMITMENT	LEAD
2012-2013	
Installation of CCS at Halifax MCTS.	DG, ITS
Installation of the CCS training system at the College.	DG, ITS
2013-2014	
Execute the asset component of the MCTS consolidation plan in the Arctic.	DG, ITS
Continue installation of CCS at all Regional MCTS sites per project plan.	DG, ITS

Engineering and Maintenance Manuals
ITS is committed to delivering in service support as efficiently as possible. To do so, significant effort has been put into publishing engineering maintenance manuals and standardized maintenance plans, fundamental to our ongoing commitment to provide planned maintenance services. This year's focus will be on ensuring processes and practices outlined in the manuals are implemented in the field.

Loran-C Infrastructure Removal
The CCG has begun removing Canada's Loran-C system, located in the Newfoundland and Pacific Regions as a result of the United States Coast Guard and the Canadian Coast Guard announcement in August 2010 to terminate Loran-C service in North America.

The project consists of removing the infrastructure and conducting environmental assessments of five transmitting sites. The asset base and supporting infrastructure includes towers, buildings, equipment, power systems, fuel storage and access roads.

COMMITMENT	LEAD
2012-2013	
Finalize the removal of Loran-C equipment and towers, and develop a remediation plan in order to divest the properties.	AC, Pacific AC, NL DG, ITS

Program Business Management
Following on the DFO priority of advancing management and operational excellence ITS will action key recommendations made in last year's A-base review as well as examine key cost-savings activities identified by the Executive Boards of ITS and Maritime Services.

Program Site Prioritization
Refurbishment of Aids to Navigation currently receives approximately $8 million per year from the CCG capital budget with funds being allocated to regions based on regional priorities and capacity to deliver projects. While much needed re-investment projects are being successfully delivered, the current method of allocating funding is focused on regional as

opposed to national priorities and leaves CCG vulnerable in the demonstration of appropriate use of funding. A key recommendation of the A-base review is the establishment of a methodology to determine national priorities for sites based on requirements. To that end, ITS and MS have developed some guiding principles and a framework for evaluating the priority of each individual aid to navigation based primarily upon operational importance, physical condition and potential risk to CCG programs.

This year the methodology will be formalized and will be used to better guide future investments. Future years will see a similar methodology applied to MCTS assets.

COMMITMENT	LEAD
2012-2013	
Finalize prioritization methodology for Aids to Navigation Asset Capital Projects.	DG, ITS DG, MS

Service Delivery Models

Today, service delivery models applied to the performance of maintenance activities are inconsistent across the country which in turn leads to inconsistent levels of service and varying costs associated with the provision of the service. Looking to the future, we will, where possible, put in place national standing offers for the maintenance of fixed aids.

Program Performance Measurement Strategy

The purpose of the performance measurement strategy for the Canadian Coast Guard's (CCG) Shore-Based Asset Readiness (SBAR) Program is to describe the program, how it moves from its key program elements (inputs and activities) towards outputs (services and products) and outcomes or results. It shows which measures and indicators will be used as well as the data collection process to support ongoing evaluation of program efficiency and effectiveness.

The results of the performance measurement strategy articulates program performance and will demonstrate performance trends in order to enhance the management of the program through informed decision making and planning. It provides the essential feedback loop to management, enabling proactive problem solving and continuous improvement.

Health, Safety and Environmental (HSE) Compliance Management System (CMS)

The Coast Guard is subject to federal health, safety and environmental legislation and regulations, namely Part II of the Canada Labour Code, and the Canada Occupational Health and Safety (COHS) Regulations, the Maritime Occupational Health and Safety Regulations (MOHS), *Canadian Environmental Protection Act* (CEPA), the *Canada Shipping Act* and other applicable policies, directives, standards and procedures. Currently, the CCG has in place a national Fleet Safety Management System (SMS) for CCG on-board vessel operations to comply with applicable legislation and associated policy framework. While there are some regional procedures addressing health, safety and environment for shore-side CCG operations, a national health, safety and environmental

management system does not exist. As such, the CCG Management Board has endorsed the implementation of a national Health Safety and Environmental (HSE) Compliance Management System for all CCG shore-based operations.

The HSE Compliance Management System will 'operationalize' DFO's OHS and Environmental programs for CCG's operations ashore. It will also introduce an HSE Compliance Audit Program to ensure consistent management of HSE across all regions. The benefits of the HSE Compliance Management System for CCG shore-side operations include:

- Compliance to internal and external requirements and demonstrate due diligence;
- An expected reduction in injury rates and improved environmental performance including associated costs as a result of increased employee awareness of risks, hazards through training and awareness initiatives, workplace inspections etc;
- A nationally consistent and pro-active (less reactive) approach to HSE compliance;
- Identification of gaps and the prioritization of risks resulting in new safety procedures; and
- Improved safety culture across CCG shore-side operations.

In fiscal year 2012-2013, HSE Compliance will be focusing on the development and initial implementation of the HSE Compliance Management System for shore-based operations with and eye on ensuring future harmonization with the fleet safety management system and the DFO environmental management system. This will involve the roll-out of key HSECMS standards across CCG shore-based operations including the communication of the new CCG Health, Safety, Security and Environmental Policy.

COMMITMENT	LEAD
2012-2013	
Roll-out the two key processes of the HSECMS system; the process to identify and keep current our legislative and other requirements, and the process for identification of hazards and risk analysis.	DG, ITS
2013-2014	
Roll-out of remainder of HSECMS standards and related processes.	DG, ITS

TABLE 13: SHORE-BASED ASSET READINESS RESOURCE PROFILE, 2012-2013 (THOUSANDS OF DOLLARS)

Region	Salary	O&M	Total
Newfoundland and Labrador	7,232	2,758	**9,990**
Maritimes	9,267	3,568	**12,835**
Quebec	8,516	4,232	**12,748**
Central & Arctic	9,333	2,471	**11,804**
Pacific	9,360	3,211	**12,571**
National Capital Region	7,680	5,024	**12,704**
Direct Program Total	**51,388**	**21,264**	**72,652**

CANADIAN COAST GUARD COLLEGE

2011-2012 Accomplishments

- Provided training to 203 students in the Officer Training Program;
- Graduated 24 Ships' Officers (19 Navigation Officers & 5 Marine Engineering Officers);
- Graduated 21 MCTS Officers;
- Delivered 3 Continuous Proficiency Courses to 33 MCTS Officers representing 5 Coast Guard Regions;
- Provided training to 150 Electronic Technicians from all Regions in Canada;
- Delivered seven training sessions in Search and Rescue and three training sessions in Emergency Response to 95 Coast Guard Personnel;
- Delivered a "training week" for College employees which offered 63 training programs and courses, in both official languages, to support learning and development;
- Commissioned the installation of $6.5 million in new state-of-the-art bridge and engine rooms training simulators; and
- Conducted the National Recruitment process for the 4-year Coast Guard Officer Training Program.

The Canadian Coast Guard College is the main operational and technical training facility for CCG. Its mission is to train and develop marine professionals in support of CCG-mandated programs in marine safety, security, and environmental protection. As CCG's training centre of expertise, the College delivers quality, bilingual maritime training and services.

The College offers core national educational programs in four streams: CCG Officer Training Program and continued technical training for seagoing personnel, Marine Communications and Traffic Services, Marine Maintenance and Equipment Training, and Rescue, Safety, and Environmental Response.

As a residential training facility, the College employs approximately 112 people, including 57 instructors and 55 full-time staff dedicated to academic support, general administration and management of the institution, campus services, recruitment, library, food services and information technology.

PERFORMANCE INFORMATION

Canadian Coast Guard College 2012-13		
Provides these services...	**Measured this way...**	**With these targets...**
Trained operational personnel	Percentage of professional development courses delivered vs. professional development courses planned to be delivered	100%

To achieve this result...	**Measured this way...**	**With these targets...**
Trained operational personnel are ready to respond to the operational needs and requirements of the Government of Canada	Percentage of Officer Training Program graduates to approved trainee intake	70%
	Percentage of Marine Communications & Traffic Services Officer graduates to approved trainee intake	90%

NUMBER OF CADETS AT THE CANADIAN COAST GUARD COLLEGE

OFFICER TRAINING PROGRAM – SHIPS' OFFICERS	FORECASTED NUMBER OF STUDENTS
Fiscal year 2012-2013	238 Students
Fiscal Year 2013-2014	261 Students
Fiscal Year 2014-2015	275 Students

- Based on September 2012 class intake target of 64 students per year
- Intake target subject to change based on Fleet requirements

MCTS PROGRAM	FORECASTED NUMBER OF STUDENTS	FORECASTED NUMBER OF STUDENT
	Ab-initio Training	Continuous Proficiency Training
2012-2013	12* trainees	36* trainees
2013-2014	24* trainees	36* trainees

* Based on program requirements

TABLE 14: COAST GUARD COLLEGE RESOURCE PROFILE, 2012-2013 (THOUSANDS OF DOLLARS)

Region	Salary	O&M	Total
Canadian Coast Guard College	7,937	3,258	**11,195**
Direct Program Total	**7,937**	**3,258**	**11,195**

Key Initiatives

Transformation Plan

The Coast Guard College developed a Transformation Plan in 2009-2010 to renew the College's organizational structure to more effectively respond to growing demand for Coast Guard training. In 2011-12, the Transformation Plan was substantially completed with the majority of the College Organizational Design in place enabling the College to better respond to the training requirements of the Coast Guard organization.

A key component of the Transformation plan focussed on financial stability and accountability to ensure the College is able to provide information for strategic decision making. Financial models have been developed which provide the critical information required to make informed business decisions in the delivery of College programs.

Centre of Training Excellence – Infrastructure Renewal

The establishment of new governance frameworks ensures the College has the depth and breadth of exposure to maritime knowledge and is positioned to carry out its mission as the *"Centre of Training Excellence"* for the Canadian Coast Guard. College training programs rely heavily on simulation technology which provides students with a realistic yet safe learning environment. Supporting and sustaining this technology and infrastructure are critical to the success of the College training program. Working collaboratively with Integrated Technical Services to establish a life-cycle asset management framework will ensure optimal maintenance of the asset base and training infrastructure. Infrastructure renewal continued in 2011 and the College commissioned two new state-of-the-art training simulators which provide cutting-edge learning tools for Coast Guard personnel and provide trainees with a modern training environment.

In 2011-12 the College underwent an evaluation by the Department of Fisheries and Oceans' Evaluation Directorate. The purpose of the evaluation was to assess the program's continued relevance and its performance in terms of effectiveness, efficiency and economy. The results of the review are scheduled for release in the Spring of 2012.

Search and Rescue Training

In addition to the planned program training the College delivers each year, the College met the challenge of providing additional Search and Rescue Training brought on as a result of the Search and Rescue Consolidation Project. The College worked closely with Maritime Services, Fleet, and DND to ensure new training requirements were delivered within tight timelines.

Recruitment Initiatives

The Coast Guard College is actively participating in recruitment activities to ensure a representative Coast Guard workforce. In 2011-12 the College continued its First Nations Partnership with the Unama'ki Economic Benefits Office (UEBO). As part of the partnership, the College also worked with the Nova Scotia Community College in delivering the Academic Career Connection program to help Aboriginal Students, in Cape Breton, improve their science and math skills so they are able to qualify for the Coast Guard Officer Training Program. Currently, five students from the Academic Career Connection Program have applied for entry into the Officer Training Program for September 2012. In 2012-13, the College will continue to work with the local Aboriginal Councils to ensure the Aboriginal youth who are successful in gaining entry into the Officer Training Program are provided with a support network throughout their learning journey.

In the summer of 2011, the College partnered with the Aboriginal group in holding a Science Camp for grade 9 students from five First Nation's communities in Cape Breton.

During 2011 the College participated in career fairs, social media and advertising campaigns to foster an awareness of Coast Guard training and career opportunities available to Canadians who are interested in working in the maritime field. During the 2011 recruitment campaign for the Coast Guard Officer Training Program, the College received almost 1200 applications for entry into the four year officer cadet program.

Employee Training

In alignment with Coast Guard's focus on people, the College delivered a Training Week in the fall of 2011, for students and employees, offering 63 courses in both official languages. Partnering with the Canada School of Public Service, the College hosted foundational learning program courses for Coast Guard College employees as well as other federal government employees. In October 2011, the Canada School of Public Service delivered two courses - Orientation to the Public Service – (English & French) to first year trainees in the Coast Guard Officer Training Program, new College employees, as well as employees from other federal departments who are required to take the foundational course. The College will continue to work with the School of Public Service to offer courses to employees from the College campus.

As a national bilingual training facility the College is actively engaged in promoting developmental language training opportunities for employees at all groups and levels through weekday lunch sessions and evening classes at beginner, intermediate and advanced levels. A five-week intensive French language program was offered during July 2011 to College and other government employees. Enhancing language training capacity for employees and students is a fundamental element of the Coast Guard College training mandate.

INTERNATIONAL ACTIVITIES

The safety, security and sustainability of the three oceans that border Canada are in part the responsibility of the CCG. Much of what happens in the marine environment globally can have an impact on our environment. For this and other reasons, the CCG, through its program and service delivery, attends several international meetings and is involved in a number of joint training exercises. By working closely with many related organizations, the CCG advances its common objectives of marine safety and security. Sharing best practices and providing expert advice to foreign governments on coast guard operational issues is vital to ensuring the health and safety of the world's oceans.

ACHIEVEMENTS	LEAD
2011-2012	
Participated in the North Atlantic Coast Guard Forum Experts Meeting in La Rochelle, France.	AC, NL
Participated in the North Pacific Coast Guard Forum Multi-mission, Multi-lateral Exercise in Hawaii.	AC, Pacific
Attended the North Atlantic Coast Guard Forum Summit in Brest, France.	Deputy Commissioner, Operations
Attended the North Pacific Coast Guard Forum Summit in Yokohama, Japan.	Commissioner
Continued to provide a web platform for the North Atlantic Coast Guard Forum.	AC, NL

COMMITMENT	LEAD
2012-2013	
Develop, design, and host a Multi mission, Multi lateral live Exercise for the five international Coast Guard partners of the North Pacific Coast Guard Forum, to occur in the Pacific Region during the summer of 2013.	AC, Pacific

Below are a few examples of our international activities:

- A CCG-led Canadian delegation participates in the North Pacific Coast Guard Forum (NPCGF) which comprises six member countries (Canada, China, Japan, Korea, Russia and the United States) that meet twice a year to discuss matters related to combating illegal trafficking, combined operations, emergency response, information exchange, maritime security, secretariat (NPCGF governance) and fisheries enforcement. Every year there is an Experts Meeting in the spring, when the work directed by Principals is undertaken. The Summit of Principals, at which the lead representatives of member countries review and approve the recommendations of the experts and establish the Forum's direction for the following year, is held in the fall. The responsibility to host these meetings rotates among the six member countries of this Forum. As responsibility for hosting in 2012 fell to China, CCG will lead a Canadian delegation to Xiamen in March for the Experts meeting and Shanghai in September 2012 for the Summit. The Russian Federation will serve as meeting host for the 2013 proceedings of the Forum.

- The Canadian delegation to North Atlantic Coast Guard Forum (NACGF) meetings is also led by CCG. This forum comprises 20 nations, of which most are members of the European Union. Its focus is also on marine safety and security, but in the North Atlantic maritime environment. The United Kingdom will serve as Forum host for 2012. A CCG-led delegation will attend the Experts Meeting in April in Southampton and the Summit scheduled for October in Portsmouth. Portugal will host both meetings of the NACGF in 2013.

- CCG works with several international organizations such as the International Maritime Organization (IMO) and the

International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA). This cooperation leads to the development of common rules, regulations, policies and technology for safe and secure marine navigation. These organizations also develop and recommend technical standards for aids to navigation as well as the advent of e-navigation, which are areas that are among Coast Guard's core responsibilities and activities for ensuring safe, economical and efficient movement of maritime traffic in Canadian waters.

- Being neighbours, CCG and the United Stated Coast Guard (USCG) share maritime interests as well as a number of clients and stakeholders. Our efforts at continuous improvement involve performing joint exercises on a regular basis. Every year, a summit of the leaders of both organizations is held to ensure ongoing cooperation and provide guidance for this valuable partnership. The CCG attended the Canada – United States Coast Guard Summit hosted by the USCG in Boston, Massachusetts in February 2011. The focus of the Boston Summit was a national level response to maritime threats and disasters and included presentations on Deepwater Horizon, Maritime Operational Threat Response (MOTR) and Marine Event Response Protocol (MERP). CCG has committed to hosting the next meeting of the Canada-United States Coast Guard Summit in Victoria, British Columbia in June 2012.

- In December 2011, Coast Guard welcomed the latest Korea Coast Guard official to temporarily reside in Canada for a one-year study and training assignment with our personnel in Pacific Region. This international exchange opportunity was made possible by a formal Memorandum of Understanding on Assignments that was signed by both coast guard agencies in 2008.

6 FINANCIAL INFORMATION

In this, our 50th anniversary, the Agency finds itself at a crossroad in terms of its finances. On one hand we continue to search for more efficient ways of doing business, and on the other hand, we have been the beneficiary of significant investments in our Fleet.

Not surprisingly, after years of increased government spending to combat the global recession, the entire federal government is now in deficit reduction mode. As part of the deficit reduction action plan implementation, CCG will undergo adjustments, which will help reduce the Department's overall budget.

Since 2006 the Government of Canada has invested over $1.6 billion in the Canadian Coast Guard. The majority of these investments have focused on building new ships and the enhancement of some programs in the Arctic. When these projects are complete, CCG expects to realize some savings through reduced maintenance costs and unplanned breakdowns. However, despite the significance of these investments, the Coast Guard is still facing a gap in its investment requirements for the balance of the Fleet and shore-side assets.

With an organization such as the Canadian Coast Guard, where over 95% of our business is dependent on assets, it is essential that the Agency focus resources on properly managing its asset base. The CCG has developed a Fleet Renewal Plan to provide a sustainable way forward in terms of the life-cycle replacement of our ships and aircraft. Having completed this Plan, it is now important for us to shift focus to the shore-side with the development of a Shore-Based Assets Renewal Plan.

The combination of these two asset renewal plans, feeding our Investment Plan, will ensure that the Agency's asset base is ready and capable of delivering the Agency's mandate.

OPERATING ENVIRONMENT

Demand for the Agency's services continues to increase, while our operating funds and revenues have remained stable. This has placed pressure on the Agency's operating budgets as the effects of inflation become more evident. The Agency has used temporary sources of funding to maintain service levels and protect front-line service to Canadians, but this is not sustainable. In fact, in two of the last three years, the Agency has had to seek temporary funding relief from the Treasury Board to offset increased fuel prices.

Given the current economic climate, it is unlikely that the Coast Guard will receive permanent, ongoing funding to alleviate this situation. We have seen significant internal reallocations from shore-support functions to front-line services such that our shore-support represents only 2.0% of the budget, whereas in the past it represented 2.3%. Very little further

reallocations will be possible while maintaining adequate support for front-line services. With this in mind, the Agency will search for alternatives to address our operating budget pressures.

Since 1996 and 1998 respectively, user fees have provided essential financial support for the services provided by Coast Guard to the direct benefit of the commercial marine industry. However the marine industry's contribution to these services is just a small portion of the full cost of the services delivered to commercial shipping. This gap needs to be addressed. Planning is underway to establish a task force to review and rebuild the Marine Services Fees costing methodology with a view to amending the fees.

The Agency is optimistic that increased efficiency through the evolution of our programs; sustainable investments in our assets; and closing the revenue gap will help set a strong foundation for the Canadian Coast Guard for the next fifty years.

ASSETS AND LIABILITIES

CCG uses a wide range of equipment and other physical assets to carry out its day-to-day activities. The CCG Asset base is made up of 15,211 individual assets with individual values greater than $10,000. They can be divided into two broad categories:

- Equipment and Other Moveable Assets – land- and water-based assets (other than vessels) used in the delivery of CCG's programs (e.g. fixed and floating aids to navigation, communication towers, etc.). This category also includes Life-cycle Asset Management Assets (assets used in support of other CCG operations, e.g. fleet of vehicles, land-based cranes and forklifts, program-specific information systems) and Coast Guard College Assets (assets and facilities used in support of the training needs of the Agency at the Coast Guard College).

CCG's Program Infrastructure Assets are maintained every day for the benefit of all Canadians as CCG ensures a safe and secure, efficient and environmentally responsible transportation system in Canadian waters

- Fleet Assets – helicopters, small vessels and large vessels are used to deliver the programs of CCG, DFO and other external clients.

CCG's Fleet includes a wide range of vessels, varying in size from heavy icebreakers that operate in Canada's Arctic and keep the St. Lawrence open year-round to shipping traffic, to small rigid-hulled inflatables that carry out rescue and patrols on inland waterways.

The replacement value of CCG's assets is $14 billion. The realities of today's shipbuilding costs were incorporated into the replacement value as evaluated in the most recent Fleet Renewal Plan.

Although CCG's assets carry a replacement value of $14 billion, the depreciated book value of the entire asset base is $725M. In line with the categories outlined above, CCG's assets for planning and management are:

- $12.5 billion in Fleet assets with a net book value of $473 million; and
- $1.5 billion in equipment and other moveable assets with a net book value of $252M.

In recent years it has become apparent that the inadequate recapitalization of our assets would eventually result in the inability of CCG to sustain its required levels of service. The assets on which the CCG relies are now beyond the life expectancy and the way forward will have to include new resources and a reduction of infrastructure. Conducting a rationalization study of shore-based infrastructure will be key in order to reduce the real property shore-based asset base.

Since 2006, the CCG has received over $1.4 billion in funding for vessel procurement. In 2013 the CCG will launch a new Hovercraft and by 2014 the CCG will launch 9 new Mid-Shore Patrol Vessels. Several vessels are also funded and are in the development stages, including 3 Offshore Fisheries Science Vessels, 1 Offshore Oceanographic Science Vessel and 1 Polar Icebreaker.

Despite these investments, CCG's overall asset base continues to deteriorate. In parallel, the CCG must also respond to rapidly accelerating change as technological advancements are revolutionizing communications and aids to navigation services are moving away from traditional physical aids to modern electronic systems and information based services. Significant strategic investments will be required to enable the CCG to move forward effectively.

The continued deterioration of this asset base is also a reflection of the enormous challenge posed by the sheer size of Canada. While there have been improvements, there is still a continued reliance on outdated and fully depreciated infrastructure as recapitalization has not kept up with the rate of depreciation. Asset condition will need to be addressed to ensure that the CCG can maintain the current service levels to Canadians.

In order to better communicate our asset management and investment planning picture in a more holistic and integrated manner, CCG has embarked upon an initiative to update its overall planning process for capital investments. Now in its fourth year, the Integrated Investment Planning process ensures that our investment decisions are based on a full assessment of risk, priority and capability requirements.

TABLE 15: CCG DERIVATION OF 2012-2013 BUDGET ALLOCATION

	Salary	O&M*	Sub-total	Major Capital	Contribu-tions	VNR	Total
Total available for CCG program activities in 2011-12	317,299	151,008	468,307	237,217	4,921	(48,014)	662,431
Reversal of EOSS in-year funding for at-sea science programs	-	(5,400)	(5,400)	-	-	-	(5,400)
MSPV	2,655	8,114	10,769	-	-	-	10,769
Vessel procurement reprofiling	-	-	-	(26,098)	-	-	(26,098)
Maritime Services - VNR moratorium	-	(100)	(100)	-	-	100	-
Efficiency savings	(1,717)	(961)	(2,678)	-	-	-	(2,678)
Sunset funding - MSOC, NAVAREA, and Pangnirtung support	173	(1,535)	(1,362)	2,014	-	-	652
Contract Settlement adjustment	(1,169)	-	(1,169)	-	-	-	(1,169)
Transfer to Shared Service Canada	-	(1,937)	(1,937)	(1)	-	-	(1,938)
Adjustments to program funding and O&M to Salary conversion (includes some sunsetting funds)	98	(118)	(20)	(1)	-	-	(21)
Total available for CCG program activities in 2012-13	**317,339**	**149,072**	**466,411**	**213,131**	**4,921**	(47,914)	**636,549**

* 2011-12 budget includes EFM and EOSS fuel budget and in-year funding from EOSS for at-sea science programs.

TABLE 16: CCG VOTE 1 AND VOTE 5 LOWER LEVEL BUDGET ALLOCATIONS

		Vote 1						Vote 5
		Salary	Other O&M	Fuel	VNR	Minor Capital	Vote 1 Total	Major Capital
Newfoundland		66,980	19,056	16,652	15	139	102,842	-
Maritimes		56,163	13,364	6,908	-	216	76,651	-
Quebec		49,561	17,270	7,005	(4,600)	284	69,520	-
Central & Arctic		41,595	13,105	3,087	(27)	195	57,955	-
Pacific		63,273	17,080	5,250	(148)	458	85,912	-
NCR	Commissioner	963	215	-	-	-	1,178	-
	MS	8,267	13,334	-	(41,454)	-	(19,853)	2,014
	Fleet	5,903	4,088	-	-	-	9,991	-
	ITS	7,757	5,079	-	-	-	12,836	-
	IBMS	3,035	504	-	-	-	3,539	-
	VP	-	-	-	-	-	-	81,563
	College	7,815	3,186	-	(1,700)	-	9,301	-
	Maritime Security	3,775	1,254	-	-	-	5,029	-
	P&C/Other	2,254	1,344	-	-	-	3,598	129,555
	NCR Total	39,769	29,004	-	(43,154)	-	25,619	213,131
Total CCG		**317,339**	**108,879**	**38,901**	(47,914)	**1,292**	**418,497**	**213,131**

TABLE 17: FINANCIAL ALLOCATIONS BY PAA ACTIVITY, 2012-2013 (THOUSANDS OF DOLLARS)

PAA Activity	Salary	O&M	Total Operating	Major Capital	Grants and Contributions	Total Planned Spending**
Marine Communications and Traffic Services	34,315	5,798	**40,112**	2,014	-	**42,126**
Marine Navigation	16,477	35,799	**52,276**	-	-	**52,276**
Search and Rescue Services	11,960	15,887	**27,847**	-	4,921	**32,768**
Environmental Response Services	6,474	2,899	**9,373**	-	-	**9,373**
Maritime Security	3,975	3,388	**7,363**	-	-	**7,363**
Coast Guard College	7,937	3,258	**11,195**	-	-	**11,195**
Fleet Operational Readiness*	184,814	60,779	**245,593**	173,072	-	**418,665**
Shore Based Asset Readiness	51,388	21,265	**72,653**	38,045	-	**110,698**
Total	**317,339**	**149,072**	**466,411**	**213,131**	**4,921**	**684,463**

* O&M includes EFM and EOSS ship refit and fuel funding

** Excludes Vote-Netted Revenue (VNR)

TABLE 18: FINANCIAL ALLOCATIONS BY REGION, 2012-2013 (THOUSANDS OF DOLLARS)

Region	Salary	O&M	Total
Newfoundland and Labrador	66,980	35,846	**102,826**
Maritimes	56,163	20,488	**76,651**
Quebec	49,561	24,558	**74,119**
Central & Arctic	41,595	16,387	**57,982**
Pacific	63,273	22,788	**86,061**
National Capital Region*	39,769	29,004	**68,773**
Total	**317,339**	**149,072**	**466,411**

* Funding in NCR includes a total of $18.7M related to National Programs these funds will ultimately be spent on programs delivered in the regions.

TABLE 19: FINANCIAL ALLOCATION BY PAA ACTIVITY BY REGION, 2012-2013 (THOUSANDS OF DOLLARS)

PAA Activity	Newfoundland and Labrador	Maritimes	Quebec	Central & Arctic	Pacific	National Capital Region	National Programs	Total
Marine Communications and Traffic Services	6,518	6,004	6,597	6,125	10,451	3,706	712	**40,112**
Marine Navigation	10,348	5,694	8,883	3,952	7,534	5,360	10,506	**52,276**
Search and Rescue Services	6,774	5,127	3,690	4,611	3,808	3,837	-	**27,847**
Environmental Response Services	1,426	1,342	1,366	1,938	1,343	1,958	-	**9,372**
Maritime Security	908	284	596	208	276	659	4,431	**7,363**
Coast Guard College	-	-	-	-	-	11,145	50	**11,195**
Fleet Operational Readiness	66,862	45,364	40,241	29,343	50,078	11,373	2,332	**245,593**
Shore Based Asset Readiness	9,990	12,835	12,748	11,804	12,571	12,079	626	**72,653**
Total	**102,826**	**76,651**	**74,119**	**57,982**	**86,061**	**50,116**	**18,656**	**466,411**

TABLE 20: NATIONAL PROGRAMS BY ACTIVITY, 2012-2013 (THOUSANDS OF DOLLARS)

PAA Activity	Ice Reconnaissance	Helicopters	Automated Identification System	Marine Security Operations Centres	Waterways, Marine works	Ship's Radio Inspection (SRI)	Marine Research and Development	NAVAREAS	Total
Marine Communications and Traffic Services	-	-	-	-	-	-	-	712.1	**712.1**
Marine Navigation	8,854.2	-	-	-	1,501.5	-	150.0	-	**10,505.7**
Search and Rescue Services	-	-	-	-	-	-	-	-	-
Environmental Response Services	-	-	-	-	-	-	-	-	-
Maritime Security	-	-	-	4,430.9	-	-	-	-	**4,430.9**
Coast Guard College	-	-	-	-	-	49.8	-	-	**49.8**
Fleet Operational Readiness	-	2,332.0	-	-	-	-	-	-	**2,332.0**
Shore Based Asset Readiness	-	-	611.0	-	-	14.5	-	-	**625.5**
Total	**8,854**	**2,332**	**611**	**4,431**	**1,502**	**64**	**150**	**712**	**18,656.0**

TABLE 21: CCG VOTE-NETTED REVENUE TARGETS BY PAA ACTIVITY, 2012-2013 (THOUSANDS OF DOLLARS)

PAA Activity	Marine Service Navigation Fees	Icebreaking Services	Marine Dredging Fee	CCG College Fees	Other	Total
Aids to Navigation Services	(4,750.4)	-	-	-	-	**(4,750.4)**
Waterways Management Services	-	-	**(4,600.0)**	-	-	**(4,600.0)**
Marine Communications and Traffic Services	-	-	-	-	(44.3)	**(44.3)**
Icebreaking Services	-	(2,409.3)	-	-	-	**(2,409.3)**
Coast Guard College	-	-	-	(1,700.0)	-	**(1,700.0)**
Coast Guard Fleet Operational Readiness	-	-	-	-	(21,987.4)	**(21,987.4)**
Shore Based Asset Readiness	-	-	-	-	(12,423.2)	**(12,423.2)**
Total	**(4,750.4)**	**(2,409.3)**	**(4,600.0)**	**(1,700.0)**	**(34,454.9)**	**(47,914.6)**

TABLE 22: CCG MAJOR CAPITAL BUDGET AND PLANNED EXPENDITURES - OVERVIEW (THOUSANDS OF DOLLARS)

BUDGET OVERVIEW	2012-13	2013-14	2014-15	2015-16	2016-17	Total
A-BASE BUDGET						
A-Base Budget Envelopes:						
Refit - Vessels	54,400.0	54,400.0	54,400.0	54,400.0	54,400.0	272,000.0
Refit - Additional (Large Icebreakers)	5,250.0	10,000.0	10,000.0	5,000.0	-	30,250.0
Refit - Helicopters	5,600.0	5,600.0	5,600.0	5,600.0	5,600.0	28,000.0
Refit - Shore Based Infrastructure	25,000.0	25,000.0	25,000.0	25,000.0	25,000.0	125,000.0
Waterway Channel Restoration	3,815.0	3,815.0	3,815.0	3,815.0	3,815.0	19,075.0
Vessel Maintenance Management	6,500.0	6,500.0	6,500.0	6,500.0	6,500.0	32,500.0
Small Craft Replacement	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0	20,000.0
Other Investments	24,007.4	19,257.4	19,257.4	24,257.4	29,257.4	116,037.0
Subtotal	***128,572.4***	***128,572.4***	***128,572.4***	***128,572.4***	***128,572.4***	***642,862.0***
A-Base Adjustments						
Carry Forward	8,079.9	-	-	-	-	8,079.9
Loan to Other DFO Centres of Expertise	65.0	-	-	-	-	65.0
Other Adjustments (e.g. MSVP contrib.)	(8,403.3)	(6,096.7)	-	-	-	(14,500.0)
EBP Adjustments	-	-	-	-	-	-
Total A-Base Budget	***128,314.0***	***122,475.7***	***128,572.4***	***128,572.4***	***128,572.4***	***636,506.9***

CONTINUED...

...TABLE 22: CONTINUED

EXTERNAL FUNDING BUDGET						
External Funding Budget Envelopes:						
Vessel Procurement	176,718.9	232,820.5	330,464.5	260,076.4	153,000.0	1,153,080.3
NAVAREAs	2,013.6	813.6	-	-	-	2,827.1
Fleet Renewal Plan	11,654.6	11,154.0	7,034.6	-	-	29,843.2
Subtotal	***190,387.1***	***244,788.1***	***337,499.1***	***260,076.4***	***153,000.0***	***1,185,750.6***
External Funding Adjustments:						
Carry Forward	49,634.4	-	-	-	-	49,634.4
Other Adjustments (e.g. MSPV contrib.)	8,403.3	6,096.7	-	-	-	14,500.0
EBP Adjustments	(878.3)	(990.6)	(1,006.1)	(868.3)	(750.0)	(4,493.3)
Total External Funding Budget	***247,546.5***	***249,894.2***	***336,493.0***	***259,208.1***	***152,250.0***	***1,245,391.7***
Total Budget	**375,860.5**	**372,369.9**	**465,065.4**	**387,780.5**	**280,822.4**	**1,881,898.6**

PLANNED SPENDING OVERVIEW

EQUIPMENT AND OTHER MOVEABLE ASSETS						
Refit - Shore Based Assets	***24,839.0***	***26,819.0***	***27,396.0***	***27,426.0***	***27,456.0***	***133,936.0***
Regular Requirements	24,839.0	26,024.0	25,000.0	25,000.0	25,000.0	125,863.0
Additional Requirements	-	795.0	2,396.0	2,426.0	2,456.0	8,073.0
Waterway Channel Restoration	***3,815.0***	***3,815.0***	***3,815.0***	***3,816.6***	***3,815.0***	***19,076.6***
Regular Requirements	3,815.0	3,815.0	3,815.0	3,816.6	3,815.0	19,076.6
Operational Systems	***9,173.8***	***13,580.9***	***15,225.6***	***26,021.4***	***19,159.0***	***83,160.7***
New Investments	1,623.8	-	-	-	-	1,623.8
Replacements and Upgrades	7,550.0	13,580.9	15,225.6	26,021.4	19,159.0	81,536.9
Shore-Based Assets	***2,013.6***	***2,598.5***	***3,146.0***	***5,113.0***	***9,415.0***	***22,286.1***
New Investments	-	1,785.0	3,146.0	5,113.0	9,415.0	19,459.0
Special Initiatives (NAVEAREAs)	2,013.6	813.5	-	-	-	2,827.1
Divestiture and Other	***3,441.0***	***100.0***	***-***	***1,650.0***	***3,400.0***	***8,591.0***
Total EOMA	**43,282.4**	**46,913.4**	**49,582.6**	**64,027.0**	**63,245.0**	**267,050.4**

CONTINUED...

...TABLE 22: CONTINUED

FLEET (EXCLUDING LARGE VESSELS)						
Refit - Ships	***59,664.2***	***64,400.0***	***64,400.0***	***59,400.0***	***54,400.0***	***302,264.2***
Regular Requirements	59,664.2	64,400.0	64,400.0	59,400.0	54,400.0	302,264.2
Additional Requirements	-	-	-	-	-	-
Refit - Helicopters	***5,600.0***	***5,600.0***	***6,994.0***	***5,739.4***	***5,600.0***	***29,533.4***
Regular Requirements	5,600.0	5,600.0	5,600.0	5,600.0	5,600.0	28,000.0
Additional Requirements	-	-	1,394.0	139.4	-	1,533.4
Vessel Maintenance Management	***6,500.0***	***6,500.0***	***6,500.0***	***6,500.0***	***6,500.0***	***32,500.0***
Regular Requirements	6,500.0	6,500.0	6,500.0	6,500.0	6,500.0	32,500.0
Small Craft Replacement	***4,265.1***	***4,000.0***	***4,000.0***	***4,000.0***	***4,000.0***	***20,265.1***
Regular Requirements	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0	20,000.0
Special Initiatives (ER Barges)	265.1	-	-	-	-	265.1
Vessel Readiness	***26,514.6***	***13,214.0***	***10,073.6***	***-***	***-***	***49,802.2***
New Investments	26,514.6	13,214.0	10,073.6	-	-	49,802.2
Operational Systems	***9,755.6***	***4,357.7***	***550.0***	***-***	***-***	***14,663.3***
New Investments	5,874.4	3,427.8	-	-	-	9,302.2
Replacements and Upgrades	3,881.2	929.9	550.0	-	-	5,361.1
Total Fleet (excluding Large Vessels)	**112,299.5**	**98,071.7**	**92,517.6**	**75,639.4**	**70,500.0**	**449,028.2**

PROCUREMENT OF LARGE VESSELS						
Air Cushion Vehicle (ACV) - Pacific Region	7,459.3	8,588.3	5,574.7	-	-	21,622.3
Mid-Shore Patrol Vessels (MSPV)	99,894.9	17,555.7	8,403.3	-	-	125,853.9
Offshore Fisheries Science Vessels (OFSV)	52,068.1	76,659.2	80,389.8	23,509.3	-	232,626.4
Offshore Oceanographic Science Vessel (OOSV)	45,316.4	59,600.0	21,500.0	10,567.1	-	136,983.5
Polar Icebreaker	21,978.9	76,514.0	223,000.0	226,000.0	153,000.0	700,492.9
Total Procurement of Large Vessels	***226,717.6***	***238,917.2***	***338,867.8***	***260,076.4***	***153,000.0***	***1,217,579.0***
Total Planned Spending	**382,299.5**	**383,902.3**	**480,968.0**	**399,742.8**	**286,745.0**	**1,933,657.6**

ANNEX A: ECONOMIC ACTION PLAN

The Canadian Coast Guard Management Board has been working on developing various transformational initiatives in response to the Government's economic action plans. As part of these initiatives, the CCG is restructuring the organization to achieve greater efficiencies, to ensure rigour in the oversight and management of the Agency and to ensure a nationally consistent approach aligned with Departmental and Government of Canada priorities.

There are three components to the changes: Shore-side reorganization; strengthening national consistency in service delivery; and, consolidation of Marine Communications and Traffic Services.

FIGURE 10: CANADIAN COAST GUARD REGIONAL BOUNDARIES

Shore-side Reorganization

Coast Guard is moving from a five region model to a three region model as shown in the accompanying map. The three new regions are Atlantic, Central and Arctic, and Western with regional headquarters located in St. John's, Montreal and Victoria. This should result in greater efficiencies through reduced management and overhead. Complementing the regional changes will be the realignment of certain functions at headquarters in Ottawa. All operations will be organized under one directorate allowing what is currently known as Maritime Services to focus on ensuring national consistency through improved program policy and management and strengthening client relations. Certain administrative and support function will be consolidated into the Integrated Business Management Services organizations both at headquarters and in regions.

FIGURE 11: REGIONAL ORGANIZATIONAL STRUCTURE & EXECUTIVE TEAM (EFFECTIVE OCTOBER 1, 2012)

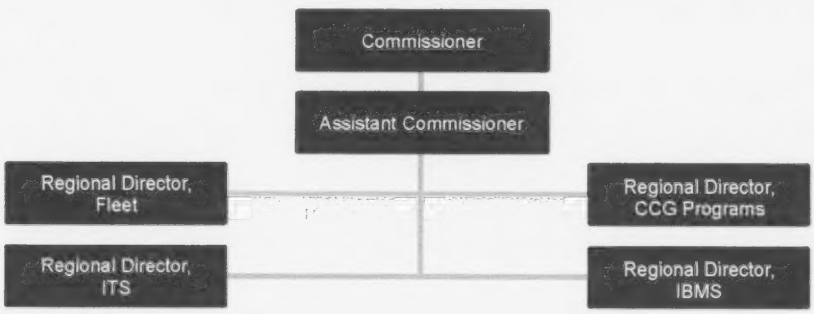
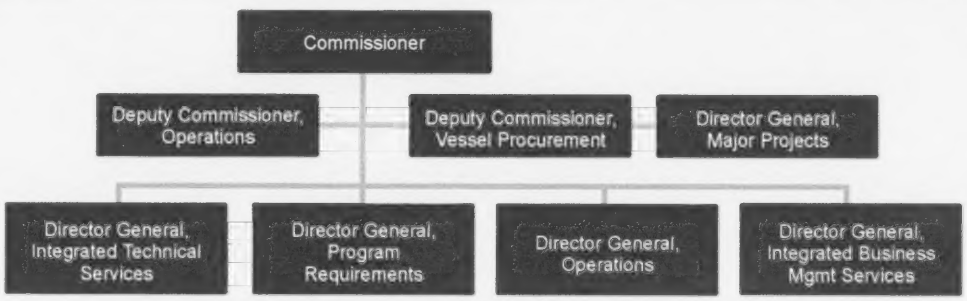


FIGURE 12: HEADQUARTERS ORGANIZATIONAL STRUCTURE & EXECUTIVE TEAM (EFFECTIVE OCTOBER 1, 2012)



Strengthening National Consistency in Service Delivery

CCG will expand its practice of contracting out the deployment and servicing of buoys 40% of which have already been contracted out. This has proven effective and efficient. Furthering this practice will allow Coast Guard to remove a number of smaller single-purpose vessels moving it closer to its vision of a multi-taskable fleet.

In the Greater Vancouver area search and rescue capacity was strengthened by funding in Budget 2010 for the acquisition of a new hovercraft for the Sea Island Base with availability 24/7. Building on this, Coast Guard plans to standardize search and rescue services in the area with the closing of the Kitsilano station and by establishing an Inshore Rescue Boat station in closer collaboration with the Canadian Coast Guard Auxiliary. Levels of Service will remain the same and this approach will be consistent with search and rescue services in other major ports across Canada.

A partnership between the Canadian Coast Guard and the Royal Canadian Navy for the delivery of the national Inshore Rescue Boat Program is also planned.

Consolidation and Modernization of Marine Communications and Traffic Services

The Canadian Coast Guard will be further modernizing and consolidating its Marine Communications and Traffic Services into twelve centres, from 22, across the country with state-of-the-art technology so that they can be better interconnected. The modernized centres will be able to seamlessly pick up any calls from other connected facilities. Some facilities will also increase their areas of responsibility and will receive additional staff and resources accordingly. As a result, the Coast Guard will be able to consolidate services into these better centres and close those with outdated technology. All of the radio towers and radar facilities will remain where they are to maintain the current level of coverage.

ANNEX B: CCG CAPITAL EXPENDITURES

The Canadian Coast Guard uses a wide range of equipment and other physical assets as it carries out its day-to-day activities. For example, search-and-rescue activities typically require rescue vessels or helicopters, as well as communications equipment; similarly, moving goods safely through Canadian waters depends on having reliable aids to navigation and may require the services of icebreakers.

The infrastructure required to support CCG activities falls into two broad groups:

- **Equipment and other moveable assets.** These include communications equipment, radio towers and radar sites, as well as aids to navigation such as buoys, beacons and environmental response equipment. These assets have an estimated replacement value of $1.5 billion.
- **Fleet assets.** These assets include 116 vessels — search and rescue lifeboats, fishery science vessels, patrol vessels, light and heavy icebreakers, etc. — and 22 helicopters. These assets have an estimated replacement value of $12.5 billion.

These assets need to be systematically maintained and eventually replaced in order to enable CCG to fulfill its mandate. This requires a long-term approach and significant financial resources, as capital expenditures account for a comparatively high percentage of our expenditures. Please note that the figures contained in the following pages may fluctuate throughout the fiscal year depending on availability of equipment and repair facilities and available funding: such as an emergency repair of a vessel as dictated by a Transport Canada inspection or the urgent requirement to repair a communication service/ equipment related to search and rescue operations on a vessel or helicopter.

Like all Government of Canada departments and agencies, Coast Guard's assets must be organized in the context of a Program Activity Architecture. Although CCG only receives its capital funding through the Fleet Operational Readiness and Shore-Based Asset Readiness program activities, the expenditures do benefit other program activities.

CCG's investment requirements are generally addressed through funding from a variety of sources. For this planning cycle, the funding sources include:

- **A-Base Major Capital Funding** – CCG is provided with an annual Major Capital (Vote 5) Budget for investment in the Agency's infrastructure.
- **External Funding Sources** – when investment needs arise that exceed the annual Major Capital budget, CCG pursues special project-based funding from Cabinet.

As part of the Canadian Coast Guard's Integrated Investment Plan (IIP), all of the capital funding has been consolidated into a single major capital budget. The total Coast Guard capital budget for 2012-2013 is $255.7 million.

PROGRAM ACTIVITY	EXAMPLES OF EXPENDITURES	FORECAST EXPENDITURE 2012-2013 (MILLIONS OF DOLLARS)
Marine Navigation		**17.2**
- Aids to Navigation	*Refurbishing, modernizing, replacing shore-based and floating aids to navigation*	**12.2**
- Waterways Management	*Restoring the Canadian portion of the Great Lakes connecting channels*	**5.0**
Marine Communications and Traffic Services	*Upgrading communications equipment at MCTS Centres and remote sites*	**0.7**
Maritime Security	*Developing critical vessel surveillance and tracking systems*	**23.6**
Shore-Based Asset Readiness	*Developing a national Operational Network for CCG systems and applications*	**1.6**
Fleet Operational Readiness	*Acquiring, replacing, refitting, modernizing fleet vessels and vessel systems*	**0.2**
Total		**339.0**
		382.3

Most of the A-Base portion of the budget is divided in six budget envelopes, including:

- Refit – Vessels
- Refit – Helicopters
- Refit – Shore-Based Infrastructure
- Waterway Channel Restoration
- Vessel Maintenance Management
- Small Craft Replacement

Any A-Base funding not allocated to these budget envelopes is considered residual and will be used for other investments. Externally-sourced funds are normally restricted as controlled budgets and can only be used for their specific intended purposes.

For further information, please see the CCG Integrated Investment Plan which is available online at www.ccg-gcc.gc.ca/eng/CCG/Publications.

ANNEX C: RESEARCH AND DEVELOPMENT PROGRAM

Research and Development supports the technological response to challenges and opportunities identified as essential to implementing CCG activities. Research and Development projects generate the knowledge required to respond to an evolving operational environment, evolving client demands and broad-based adjustments to program structures. The ongoing projects for 2012-2013, listed below, have detailed deliverables that are required to achieve mission goals.

PROJECT CODE	PROJECT TITLE	TOTAL ESTIMATED COST ($000)	2012-2013 FUNDING ($000)
Waterways Management Services			
MNW08	St. Lawrence River Water Level Forecasting Model with Ice Covers – Phase II (Effects of Ice Development to Water Levels)	76.0	**60.0**
Icebreaking Services			
FVGV6	Ice Hazard Radar	431.0	**90.0**
		Total	**150.0**

ANNEX D: CCG PROGRAM ACTIVITY ARCHITECTURE

The Program Activity Architecture (PAA) illustrates how we contribute to the department's *three* strategic outcomes:

1. **Economically Prosperous Maritime Sectors and Fisheries** is about contributing to the capacity of Canada's maritime sectors and fisheries to derive economic benefits and further enhancing their competitiveness, through departmental policies, programs and services, while supporting the sustainable and effective use of Canada's water resources.
2. **Sustainable Aquatic Ecosystems** is about the contribution of programs and policies to the conservation, protection, and sustainability of Canada's aquatic ecosystems through the management of risks that affect species, oceans and fish habitats.
3. **Safe and Secure Waters** is about contributing to maintaining and improving maritime safety and security through the provision of maritime infrastructure, information, products and services necessary to ensure safe navigation and the protection of life and property.

The chart below illustrates the relationship among the three strategic outcomes and CCG's program activities and sub-activities.

1. STRATEGIC OUTCOME:
Economically Prosperous Maritime Sectors and Fisheries
Program Activities
1.9 MARINE NAVIGATION[12]
2. STRATEGIC OUTCOME:
Sustainable Aquatic Ecosystems
Program Activity
2.5 ENVIRONMENTAL RESPONSE SERVICES
3. STRATEGIC OUTCOME:
Safe and Secure Waters
Program Activities
3.1 SEARCH AND RESCUE SERVICES
Program Sub-Activities
3.1.1 SEARCH AND RESCUE COORDINATION AND RESPONSE
3.1.2 CANADIAN COAST GUARD AUXILIARY
3.2 MARINE COMMUNICATIONS AND TRAFFIC SERVICES
3.3 MARITIME SECURITY
3.4 FLEET OPERATIONAL READINESS
Program Sub-Activities
3.4.1 FLEET OPERATIONAL CAPABILITY
3.4.2 FLEET MAINTENANCE
3.4.3 FLEET PROCUREMENT
3.5 SHORE-BASED ASSET READINESS
3.6 CANADIAN COAST GUARD COLLEGE

[12] In 2012-2013, the DFO PAA was modified to encompass Aids to Navigation, Waterways Management and Icebreaking Services under the one activity Marine Navigation.

ANNEX E: AUDITOR GENERAL'S RECOMMENDATIONS (2000 AND 2002): CROSSWALK TO 2012-2013 BUSINESS PLAN COMMITMENTS

In its 2007 Status Report, the Auditor General found that the Coast Guard had not made satisfactory progress addressing recommendations from previous audits on the Fleet (2000) and marine navigational services (2002). The Auditor General noted that one of the contributing factors was that the Coast Guard had tried to deal with all of the previous recommendations simultaneously and, as a result, had not been able to address any satisfactorily.

The 2007 Report outlined the following recommendations for the Coast Guard: focus on establishing priorities for improvement; set clear achievable goals for those priority areas; allocate sufficient, appropriate resources; and plan and implement the changes by holding managers and organizational units accountable for results. The Canadian Coast Guard is committed to using the business planning process to establish priorities for improvement in the context of delivering its programs and services.

In its "Managing the Coast Guard Fleet and Marine Navigational Services – Fisheries and Ocean Canada" Report, dated April 2008, the Standing Committee on Public Accounts (SCOPA) recommended that the Coast Guard Business Plan include an appendix cross-referencing the Plan's commitments with the Auditor General's findings. This Annex responds to that SCOPA recommendation.

Listed below are the Auditor General's 2000 and 2002 recommendations followed by the 2012-2013 Business Plan commitments which are linked to these recommendations. In a few instances, there are certain actions led by the Coast Guard which are not specific commitments within the Business Plan.

AUDITOR GENERAL'S RECOMMENDATIONS – 2000[13]

1. The Department should review how the fleet fits into its current organizational and accountability structure and take measures to ensure that the fleet can operate in a cost-effective manner (paragraph 31.72)

- **Fair and Effective Management**
  - Continue transition to Standard Organization
- **Completed and ongoing.**

2. The Department should address the weaknesses associated with its key fleet management processes, including:
a) Establishing clear, concrete and realistic program performance expectations that include a long-term perspective.
- Completed and ongoing.

b) Establishing a long-term fleet planning and funding horizon
  - See commitments under Recommendation 3
- **Completed and ongoing.**

[13] Note: a number of the Auditor General Recommendations are no longer identified in the CCG Business Plan as they are completed and/or ongoing. The work being done no longer requires a business plan commitment. They have been presented here for continuity purposes only.

c) Developing service accords between the programs and the fleet

- **Service Level Agreements with DFO Clients**
  - In 2008-2009, the Canadian Coast Guard developed Service Level Agreements (SLAs) between Fleet and DFO Oceans & Science and DFO Ecosystems & Fisheries Management Sectors – Conservation and Protection. In 2009-2010, implementation of these SLAs began as a pilot project that included the development, testing, and modification of effective performance measures.
  - In 2010-2011 CCG developed an SLA between Fleet and Maritime Services to increase transparency and internal accountability. In 2011-2012 the internal SLA was implemented on a pilot basis in order to formalize the levels of service Fleet provides to Maritime Services (Aids to Navigation, Icebreaking, Search and Rescue, and Environmental Response).
  - In 2012-13, CCG will negotiate renewed Service Level Agreements for the provision of Fleet services to DFO Ecosystems and Oceans Science and DFO Ecosystems and Fisheries Management Sectors.
- **Completed and ongoing.**

d) Establishing budgetary processes that support accountability

- **Completed.**

e) Setting up integrated information systems to enable the Department to monitor and account for the actual performance of the fleet in terms of service and cost.

- **Completed and ongoing.**

f) Implementing costing policies that support the use of the lowest-cost alternative in acquiring service while meeting departmental objectives (paragraph 31.73)

- **Completed.**

3. The Department should consider a longer-term strategy to renew its aging fleet. Such a strategy should take into consideration the changing nature of program requirements, the impact of technological change and the potential for alternative means of acquiring the service needed (paragraph 31.106)

- **Coast Guard's Fleet Renewal Initiatives**
  - National Shipbuilding Procurement Strategy
    - On June 3, 2010, the National Shipbuilding Procurement Strategy was announced to establish a long-term strategic sourcing relationship between the Government of Canada and two Canadian shipyards for the construction of its large vessels. On October 19, 2011, as a result of a fair and competitive process, Irving Shipbuilding Inc. was selected to build the combat vessels and Vancouver Shipyards Co. Ltd. was selected to build non-combat vessels. Coast Guard's Polar Icebreaker and four offshore science vessels are part of the non-combat component.
    - Umbrella Agreements, which capture the general intent and principles of the strategic sourcing relationship, were signed with Irving Shipbuilding Inc. and Vancouver Shipyards Co. Ltd., on February 13 and 14, 2012 respectively.

- The Canadian Coast Guard and Public Works and Government Services Canada will work together on the next phase of the National Shipbuilding Procurement Strategy which involves preparation and negotiation contracts for the construction of the science vessels.
- **Completed.**

- Coast Guard's Fleet Renewal Plan
  - Update the Fleet Renewal Plan to ensure congruence with Government directions and Coast Guard's long-term vision of its programs and services.
  - Manage the construction of Mid-Shore Patrol Vessels in accordance with negotiated contractual milestones.
  - Deliver three Mid-Shore Patrol Vessels.
  - Award the contract to build the Offshore Fisheries Science Vessels.
  - Manage the construction of the Offshore Fisheries Science Vessels in accordance with negotiated contractual milestones.
  - Award the contract to build the Offshore Oceanographic Science Vessel.
  - Manage the construction of the Offshore Oceanographic Science Vessel in accordance with negotiated contractual milestones.
  - Conduct the Preliminary Design Review of the Polar Icebreaker.
  - Manage construction of the Air Cushion Vehicle in accordance with negotiated contractual milestones.
  - Accept delivery of two 22-metre Near-Shore Fishery Research Vessels and one 25-metre Fishery Research Vessel.
  - **Completed and ongoing.**

  - **Project Management Framework**
    - Implement the Project Management Framework.
  - **Completed and ongoing.**

4. The Department should complete the development and implementation of lifecycle management policies and procedures for its fleet (paragraph 31.107)

- **Improve Asset Maintenance**
  - Continue to operationalize the Centre of Expertise for vessel maintenance management including funding and staffing Phase II of VMMR capital-funded positions.
  - Enter specified maintenance plans in Maximo.
- **Completed and ongoing.**

5. The Department should ensure that the fleet activity is supported by information systems that produce integrated, timely, reliable and relevant information (paragraph 31.108)

- CCG Fleet will continue to maintain and make use of its newly developed iFleet system, which captures the actual activities of fleet vessels on an hourly basis and provides information to all levels of management. The system is essential to effective decision-making, planning, performance measurement, and reporting at all levels of management and to the public

6. The Department should develop a human resource strategy for the fleet to address the need to maintain the skills and knowledge of ship-based personnel and to ensure that a sufficient number of qualified officers and crew are available in the future. The strategy should consider a long-term approach to the collective agreements with ship's personnel so that they can be administered in an efficient and economical manner and can support the fleet's operational requirements (paragraph 31.137).

- **Workforce Management**
- Through CCG's Strategic Human Resources Plan, a number of strategies, initiatives and frameworks are being put into place to address key organizational needs:
  - A Qualified and Representative Workforce
    - Develop an HR Plan addressing human resources challenges related to vessel procurement
    - Implement CCG commitments stemming from the new 2011–2014 DFO Employment Equity Action Plan
    - Implement the Aboriginal Bridging Pilot Project into the Officer Training Program
    - Implement Third Class Engineer certificate module as a pilot in Quebec Region as further implementation of the Ships' Crew Certification Program
  - Develop and Support People
    - Implement ENG-03 Coaching and Mentoring Program
    - Delivery of a Second language Program as part of the CCG Officer Training Program
  - Fair and Effective Management
    - Continue transition to Standard Organization
    - Implement the action plan to improve Performance Review System
    - Implement actions stemming from the 2011 PSES results
- **Completed and ongoing.**

- **Fleet Operational Capability** – Human Resources Initiatives
- **Completed and ongoing.**

7. The Department should regularly analyze payroll costs related to the fleet and take action to control such costs, where necessary (paragraph 31.138)

- **Complete and Ongoing.**

AUDITOR GENERAL'S RECOMMENDATIONS – 2002

8. The Canadian Coast Guard should ensure that there are up-to-date national policies, standards and levels of service expectations for its navigational support services. It should also develop the capability to monitor the implementation of these policies, standards, and expectations. (paragraph 2.53)

- Levels of Service Review
  - **Completed.**
- Aids to Navigation 21st Century (AToN21)
  - **Completed.**
- Search and Rescue Needs Analysis

- Implement the framework of the new Risk-based Analysis of Maritime Search and Rescue Delivery

9. For its navigational support services and boating safety activities, Fisheries and Oceans Canada should do the following[14]:
a) Complete the implementation of its results-based management and accountability frameworks;

- Strategic Program Framework for CCG's Maritime Services
  - **Completed and ongoing.**

b) Establish clear, measurable, concrete targets for the identified outputs and immediate outcomes for each framework;

- **Completed.**

c) Identify who is accountable for achieving targets and managing resources;

- **Completed.**

d) Align budgeting and resource allocation with the frameworks; and

- **Completed.**

e) Develop or identify sources of information to measure results (paragraph 2.68)

- **Completed and ongoing** - type and quality of data are reviewed annually.

10. The Coast Guard should complete and implement its draft guidance on risk management (paragraph 2.73)

- **Completed and ongoing** – CCG and DFO risk profiles are updated regularly and mitigation strategies are integrated into business planning.

11. Fisheries and Oceans Canada should develop and implement strategies to modernize and integrate the delivery of its navigational support services to meet user needs (paragraph 2.77)

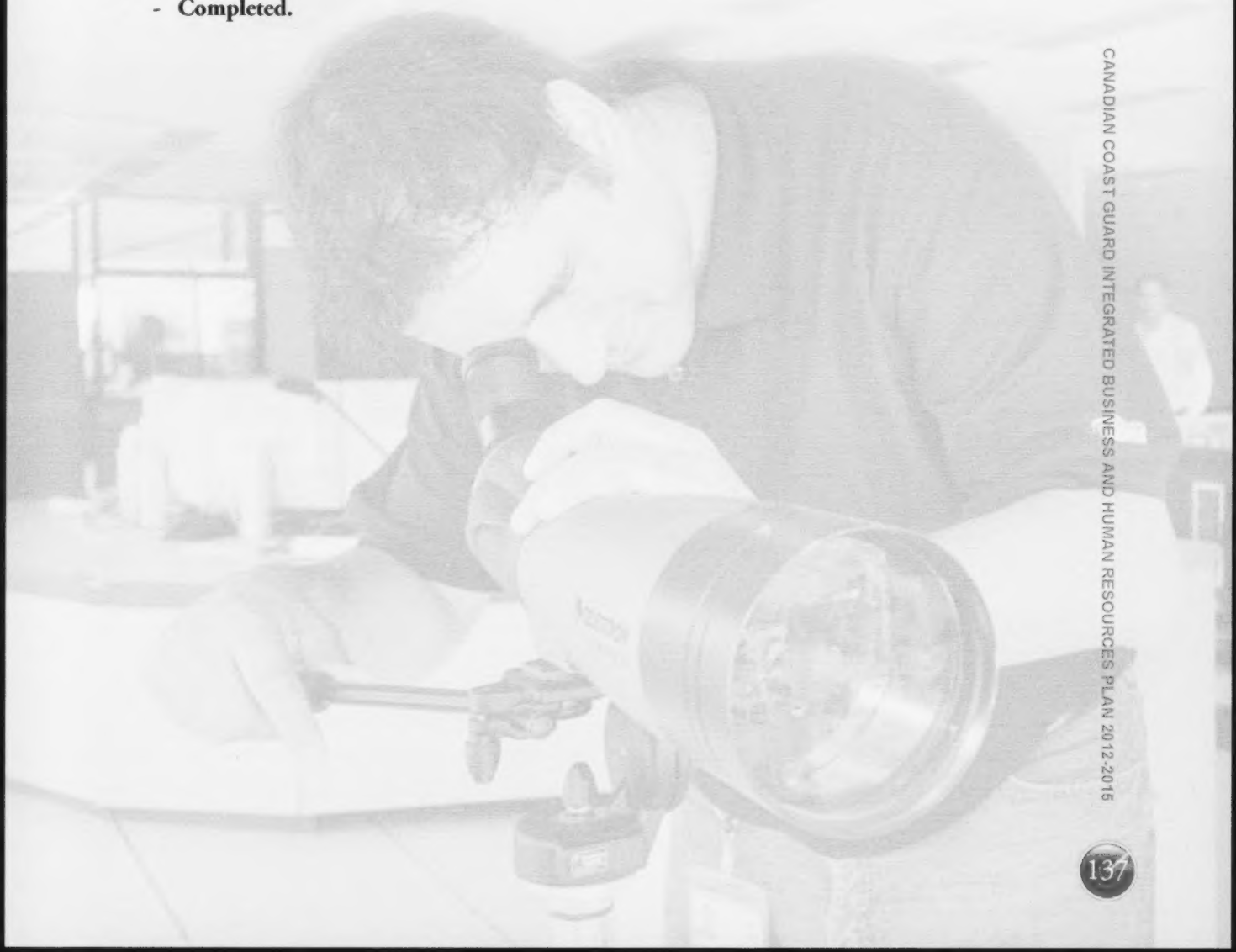
- E-navigation
  - Ongoing with implementation of federal vision and strategy for e-navigation
  - Examples of ongoing work: gap analysis assessment of the various e-navigation data sources and services; development of a concept of operation and an implementation plan for the e-navigation portal and collaboration on the work on the e-navigation phase II project towards the implementation of a dynamic under keel clearance system for use in the St. Lawrence River shipping channel
  - **Completed and Ongoing.**
- AToN21
  - **Completed.**

[14] Note: the boating safety activities (Office of Boating Safety) were transferred to Transport Canada in 2003.

- Marine Services Fees
  - Establish a task force for the purposes of reviewing and rebuilding the costing methodology and/or the cost of CCG services allocated to commercial users.
  - Develop a stakeholder consultative framework.

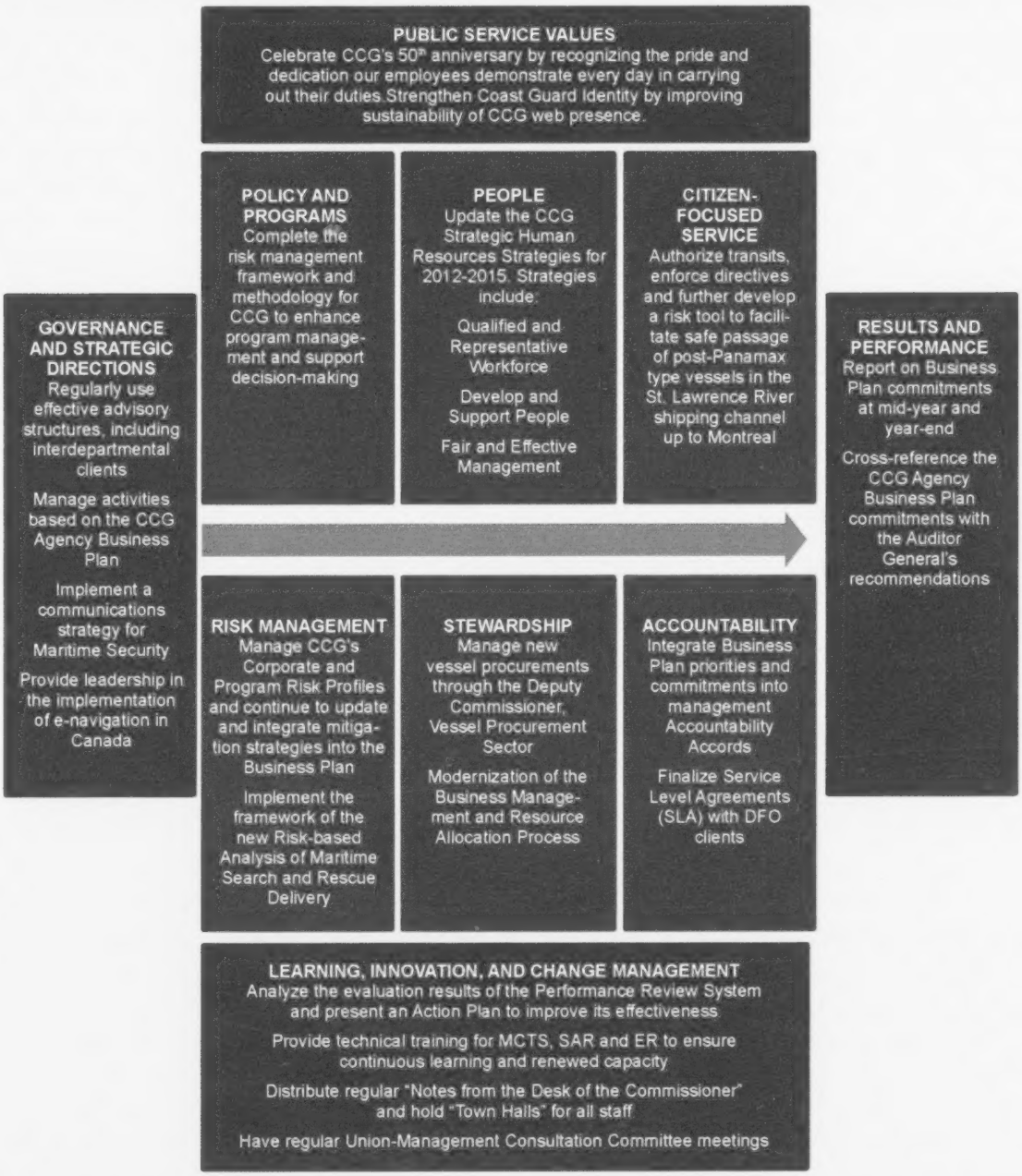
12. Fisheries and Oceans Canada should develop and implement an overall strategy for the future of its light stations, considering maritime safety and heritage objectives (paragraph 2.90)

- **Completed.**



ANNEX F: MANAGEMENT AGENDA

The Coast Guard has a clear management agenda that is consistent with the broader Management Accountability Framework (MAF) that applies to all departments and agencies (www.tbs-sct.gc.ca/maf-crg/overview-apercu/elements-eng.asp). The following chart lists some of the initiatives and activities that the Coast Guard is undertaking over the next three years that relate to the 10 elements of the MAF.

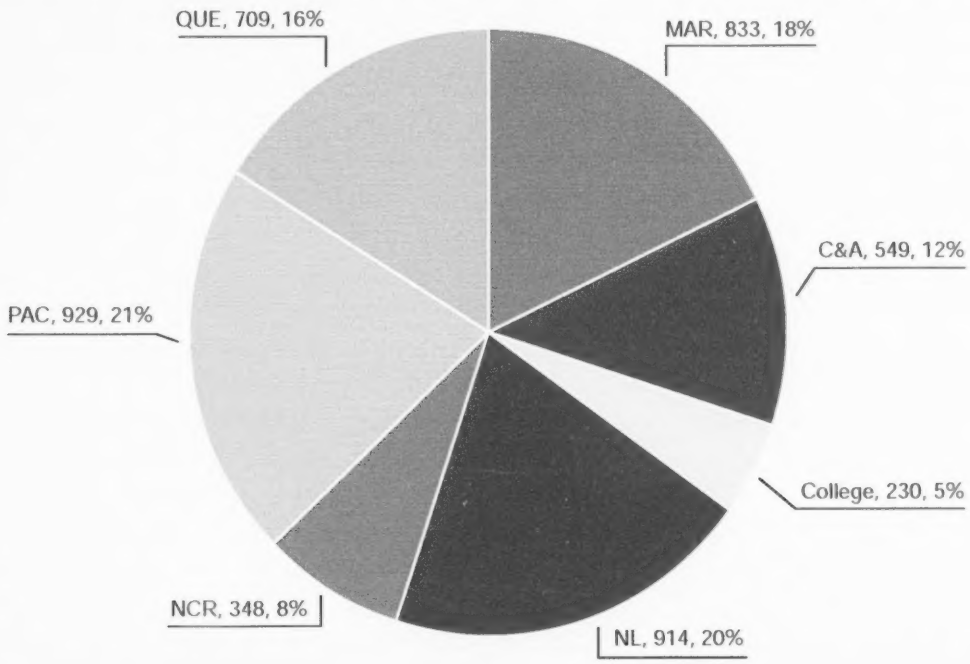

PUBLIC SERVICE VALUES
Celebrate CCG's 50th anniversary by recognizing the pride and dedication our employees demonstrate every day in carrying out their duties.Strengthen Coast Guard Identity by improving sustainability of CCG web presence.
GOVERNANCE AND STRATEGIC DIRECTIONS
Regularly use effective advisory structures, including interdepartmental clients
Manage activities based on the CCG Agency Business Plan
Implement a communications strategy for Maritime Security
Provide leadership in the implementation of e-navigation in Canada
POLICY AND PROGRAMS
Complete the risk management framework and methodology for CCG to enhance program management and support decision-making
PEOPLE
Update the CCG Strategic Human Resources Strategies for 2012-2015. Strategies include:
Qualified and Representative Workforce
Develop and Support People
Fair and Effective Management
CITIZEN-FOCUSED SERVICE
Authorize transits, enforce directives and further develop a risk tool to facilitate safe passage of post-Panamax type vessels in the St. Lawrence River shipping channel up to Montreal
RESULTS AND PERFORMANCE
Report on Business Plan commitments at mid-year and year-end
Cross-reference the CCG Agency Business Plan commitments with the Auditor General's recommendations
RISK MANAGEMENT
Manage CCG's Corporate and Program Risk Profiles and continue to update and integrate mitigation strategies into the Business Plan
Implement the framework of the new Risk-based Analysis of Maritime Search and Rescue Delivery
STEWARDSHIP
Manage new vessel procurements through the Deputy Commissioner, Vessel Procurement Sector
Modernization of the Business Management and Resource Allocation Process
ACCOUNTABILITY
Integrate Business Plan priorities and commitments into management Accountability Accords
Finalize Service Level Agreements (SLA) with DFO clients
LEARNING, INNOVATION, AND CHANGE MANAGEMENT
Analyze the evaluation results of the Performance Review System and present an Action Plan to improve its effectiveness
Provide technical training for MCTS, SAR and ER to ensure continuous learning and renewed capacity
Distribute regular "Notes from the Desk of the Commissioner" and hold "Town Halls" for all staff
Have regular Union-Management Consultation Committee meetings

ANNEX G: DEMOGRAPHICS

SNAPSHOT OF OUR WORKFORCE

As Figure 13 illustrates, the Coast Guard has 4,512 employees, the majority of whom work across five regions: Newfoundland and Labrador (NL), Maritimes (MAR), Quebec (QUE), Central and Arctic (C&A), and Pacific (PAC). CCG is further represented in Sydney, Nova Scotia at the Canadian Coast Guard College and at its Headquarters in the National Capital Region (NCR). Table 23 shows the historical regional distribution trends over the last five years.

FIGURE 13: REGIONAL DISTRIBUTION



Note: Figure 13 reflects a snapshot of the CCG workforce on April 1, 2011.

TABLE 23: REGIONAL DISTRIBUTION FROM 2007 TO 2011

YEAR	2007	2008	2009	2010	2011
PAC	939	944	900	862	929
C&A	563	521	527	505	549
NCR	300	310	353	385	348
QUE	782	773	710	759	709
MAR	957	940	936	879	833
College	166	168	194	224	230
NL	842	803	845	943	914
Total	**4,549**	**4,459**	**4,465**	**4,557**	**4,512**

The proportion of seagoing (51%) to shore-based (49%) personnel has remained relatively constant over the last several years. Seagoing occupations are comprised of navigation, marine engineering, logistics and electrical functions required to effectively and safely operate our vessels. Shore-based occupations include vessel management and maintenance, the coordination of SAR activities, providing environmental response, MCTS, operational support, technical services, instructional services, aids to navigation and business management functions.

SNAPSHOT BY OCCUPATIONAL GROUP

Labour market pressures and specialized training and experience requirements can make recruitment and retention of certain occupational groups, which are essential to service delivery, challenging. In previous years, the Canadian Coast Guard has identified five critical occupational groups: Ships' Officers (SO), Ships' Crew (SC), Radio Operations (RO), Engineers (EN) and Electronics Technologists (EL). Due to rigorous recruitment efforts, only SOs and SCs are now considered critical, representing 51.4% of the CCG's workforce. Furthermore, the number of executive-level (EX) employees dropped slightly to 50 from 54 in 2010-2011.

SNAPSHOT BY AGE GROUP

Many of the demographic challenges faced by the CCG are being felt across the federal public service. The average age of our employees is well above that of the Canadian labour market, with approximately 74% over the age of 40 and 42% over the age of 50. The average age of all CCG employees is 45.4 years, slightly higher than the public service average of 44 years. The average age of the CCG seagoing population is 44.9 and of shore-based personnel is 45.9. Table 24 shows the breakdown by age of Seagoing and Shore-based employees.

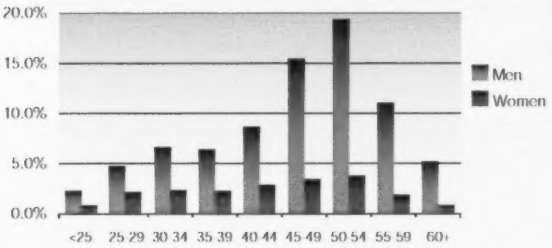
TABLE 24: SEAGOING / SHORE BASED BREAKDOWN BY AGE

	# of Employees	%	Average Age
Seagoing	2,320	51%	44.9
Shore-based	2,192	49%	45.9
Total	**4,512**	**100%**	**45.4**

SNAPSHOT BY GENDER

Figure 14 represents the ratio of women to men in each of the noted age groups. The graph shows that the percentage of men in each age group is at least double that of women, with only 20% of CCG employees being female. However, the gap is smaller for those under the age of 45, indicating that the rate of recruitment of women is approaching that of men.

FIGURE 14: DISTRIBUTION BY AGE GROUP AND GENDER



ACTUAL RETIREMENTS

Presently, approximately 44% of public servants defer their retirement by an average of four years.[15] Table 25 shows the percentage of CCG employees, in each occupational group, who retire immediately upon eligibility. Of significance in Coast Guard's human resources planning, Ships' Officers have historically worked well beyond the point at which they are eligible to retire. Additionally, a portion of retired Coast Guard employees return to our workforce in another capacity (such as term, casual or contract employees), which allows corporate knowledge transfer to existing staff and makes available to CCG trained resources able to fully perform their duties.

The number of actual retirements in 2010-2011 dropped significantly to 23.2% from 36.9% in 2009–2010.

PROJECTED RETIREMENTS

Approximately 30% of CCG's workforce is eligible to retire by 2016 (a percentage that has remained stable since 2006); however, it is expected that the number of those eligible to retire will continue to increase each year, given the high number of employees who defer retirement. The CCG will closely monitor these trends to ensure that it maintains a stable workforce.

TABLE 25: RATE OF RETIREMENT UPON ELIGIBILITY

2010-2011	
OCCUPATIONAL GROUPS	RATE OF RETIREMENTS AT ELIGIBILITY
LI	16.1%
EN	70.0%
SO	49.4%
CR	44.4%
EG	14.3%
AS	105.9%
RO	53.8%
GT	25.0%
SC	46.5%
EL	41.9%
GL	53.8%
EX	57.1%
Other	21.7%
Average	44.5%

ATTRITION

Attrition rates are based on both retirement and residual attrition (resignations, transfers out and deaths), with retirements being the largest percentage. Actual attrition rates have remained stable over the last five years, with a total attrition rate of 5.8% for 2010-2011.

By 2016, CCG anticipates that approximately 1,745 employees (39% of our total workforce) will have left the Agency. This includes the potential loss of 766 employees from our critical groups (SC and SO), representing 44% of total projected departures.

[15] Dan Fox, Business and Labour Market Analysis Division, Statistics Canada, "Federal Public Service Retirements: Trends in the New Millennium", 11-621-M, Number 68, December 2, 2009, www.statcan.gc.ca/pub/11-621-m/11-621-m2008068-eng.htm

TABLE 26: ATTRITION RATE – PROJECTED NUMBER OF EMPLOYEES LEAVING IN THE COMING YEARS

Occupational Group	Projected Departure 2011	Projected Departure 2012	Projected Departure 2013	Projected Departure 2014	Projected Departure 2015	Projected Departure 2016
AS	25	21	21	22	22	23
CR	21	16	15	16	13	15
EG	5	4	4	4	5	5
EL	24	18	14	13	12	16
EN	5	5	5	5	4	4
EX	6	8	6	5	4	5
GL	27	24	25	22	16	15
GT	34	29	25	21	23	24
LI	12	10	9	8	8	8
RO	21	19	18	18	17	18
SC	74	72	71	66	65	69
SO	64	57	60	58	56	54
OTHER	12	12	11	10	8	8
Total	**330**	**295**	**284**	**268**	**253**	**264**

Given that it is expected that actual and projected retirement will increase in the near future, it can be deduced that attrition rates should also rise.

As such, attrition rates will be closely monitored in order to develop effective succession plans. Knowledge transfer will be emphasized for shore-based occupations, whereas, ensuring accurate projections of which certificates will leave, and when, as well as ensuring that those certificates and commensurate experience can be replaced when required will become increasingly important.

TEMPORARY EMPLOYMENT

Indeterminate employees make up approximately 86% of CCG's workforce, with the remaining 14% comprised of term and seasonal employees, casual workers and students. Short-term employment is necessary due to our need to have ships with a full complement of professionally qualified officers and crew before a vessel can leave port, our need to respond quickly to unpredictable events and conditions, and to support our increased human resource requirements during the summer season.

The CCG strongly encourages its managers to reduce reliance on short-term measures. As such, in 2011, the number of term appointments of more than three months decreased by 50% to 236, after rising to a high of 426 (9.3% of the workforce) in 2010. Additionally, recent workforce adjustment measures to ensure continuity of employment for indeterminate CCG employees has also reduced the number of short-term measures. For example, term employment of less than three months remains at a low of 0.3% of the workforce in 2011, while casual employment only increased slightly to 3.1% of the workforce.

Table 27 breaks down our workforce by tenure from 2007 to 2011. As shown, the number of determinate employment has been reduced, particularly for term employees and students.

TERM APPOINTMENTS OVER TWO YEARS

Indeterminate staffing is expected to significantly decrease the number of terms over the next few years. This expectation is evident, as the number of term appointments over two years in 2011 decreased from 81 to 57, a drop of 42% (see Table 28). The CCG will continue to monitor term appointments over two years in its ongoing efforts to stabilize its workforce.

TABLE 27: EMPLOYMENT TENURE FROM 2007 TO 2011

Year	INDETERMI-NATE	TERM	SEASONAL	CASUAL	STUDENT*	TOTAL
2007	3,784	332	**275**	146	17	**4,554**
2008	3,680	383	**267**	114	15	**4,459**
2009	3,770	328	**263**	86	18	**4,465**
2010	3,873	302	**273**	83	26	**4,557**
2011	3,899	106	**284**	79	4	**4,512**

Note: Figures were tabulated on April 1 of each year. They do not include the higher number of students typically employed in the summer.

TABLE 28: TERM APPOINTMENTS OVER TWO YEARS

YEAR	SHORE-BASED	SEA-GOING	TERMS OVER TWO YEARS	TOTAL TERM POPULATION	PERCENTAGE
2008	22	39	**61**	485	12.6%
2009	20	65	**85**	328	25.9%
2010	29	52	**81**	302	26.8%
2011	14	43	**57**	246	23.2%

OFFICIAL LANGUAGE REPRESENTATION

As a national institution that serves all Canadians, the CCG requires a bilingual workforce. In 2011, approximately 22% of CCG employees declared French as their first language, and 78% declared English. This ratio is consistent with recent years. The Agency will continue to seek out qualified, bilingual candidates for seagoing and technical positions, will make efforts to develop bilingual instructor capacity for the Canadian Coast Guard College, and will encourage employees to attend second language training, to maintain second language proficiency, and/ or to renew their language results.

UNIONS

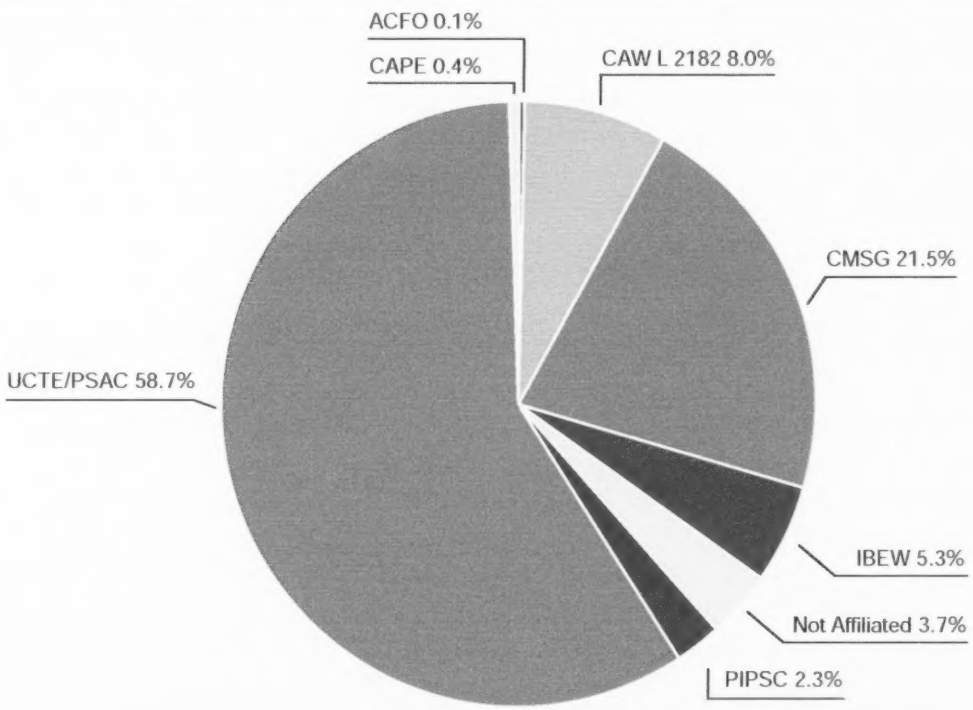
Our workforce is represented by seven unions: the Public Service Alliance of Canada (PSAC),

including The Union of Canadian Transportation Employees (UCTE), a component of PSAC; the Canadian Merchant Service Guild (CMSG); the Canadian Auto Workers (CAW–Local 2182); the International Brotherhood of Electrical Workers (IBEW); the Professional Institute of the Public Service of Canada (PIPSC); the Canadian Association of Professional Employees (CAPE); and the Association of Canadian Financial Officers (ACFO).

Approximately 59% of the CCG is represented by PSAC/UCTE (including Ships' Crew) or CMSG (Ships' Officers). Figure 15 illustrates the percentage of employees represented by each union.

Developing and maintaining effective working relationships with unions is essential to our operations. The CCG Union-Management Consultation Committee, an executive-level body, meets regularly to consult on labour relations. The CCG remains committed to working with unions, both formally and informally, to address issues and to resolve disputes and grievances.

FIGURE 15: EMPLOYEE REPRESENTATION BY UNION

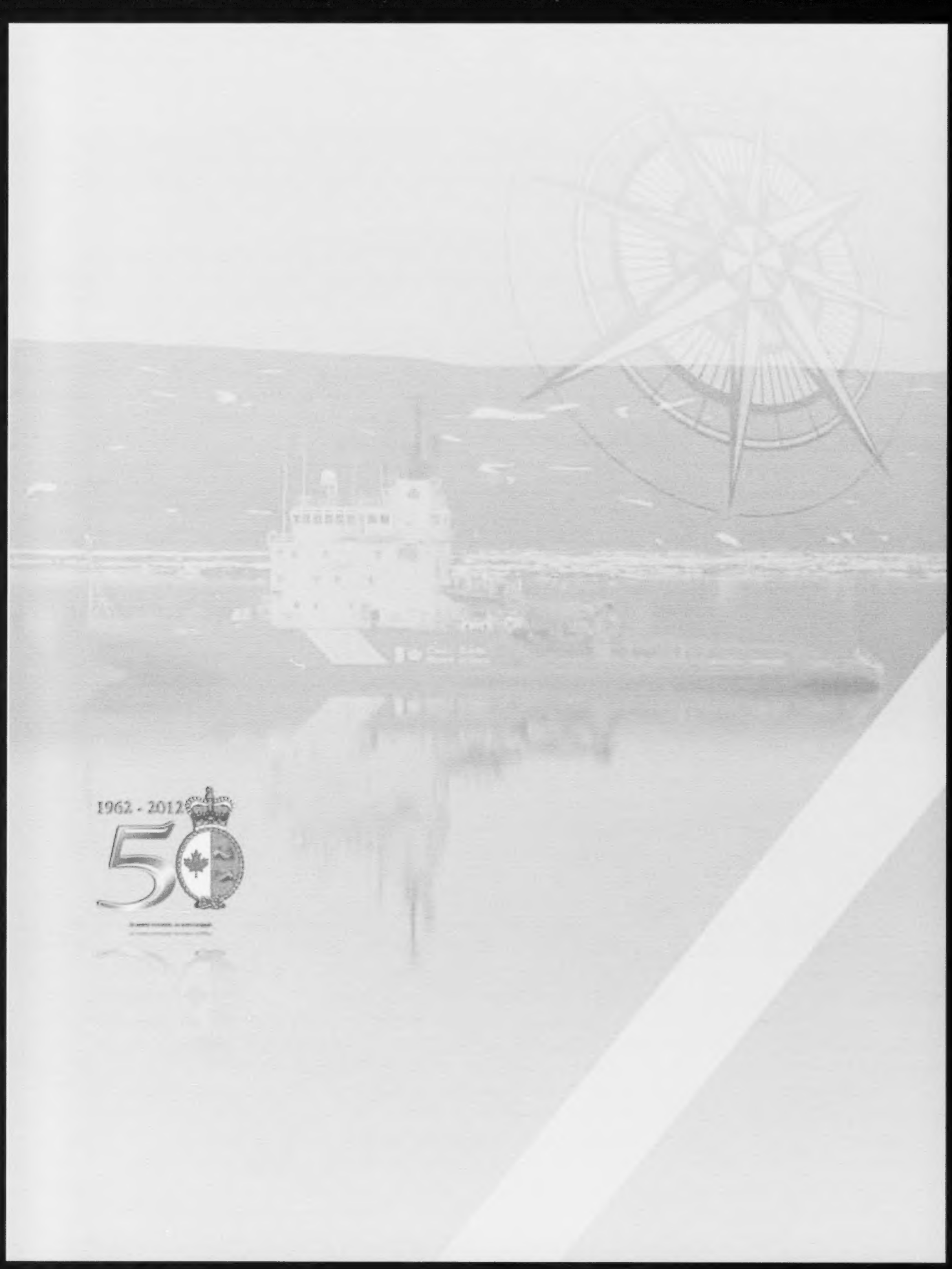


LIST OF ACRONYMS

A-Base	2006 A-Base Review
ABS	Asset Breakdown Structure
AC	Assistant Commissioner
ACFO	Association of Canadian Financial Officers
ACV	Air Cushion Vehicle
AG	Auditor General
AIS	Automatic Identification System
AMS	Asset Management System
AS	Administrative Services Group
ATN	Aids to Navigation
AToN21	Aids to Navigation of the 21st Century
AWPPA	Arctic Waters Pollution Prevention Act
BIO	Bedford Institute of Oceanography
C&A	Central and Arctic
C&P	Conservation and Protection
CAPE	Canadian Association of Professional Employees
CAW	Canadian Auto Workers
CCG	Canadian Coast Guard
CCGA	Canadian Coast Guard Auxiliary
CCGS	Canadian Coast Guard Ship
CCGAPS	CCG Automated Performance Solution
CCGC	Canadian Coast Guard College
CCGOTP	CCG Officer Training Program
CCS	Communication Control System
CEPA	Canadian Environmental Protection Act
CESD	Commissioner of the Environment and Sustainable Development
CHS	Canadian Hydrographic Service
CIS	Canadian Ice Service
CLF	Common Look and Feel
CMSG	Canadian Merchant Service Guild
CMO	Capability Management Organization
CMS	Compliance Management System
COHS	Centre for Occupational Health and Safety
COMSAR	Sub-committee on Radiocommunications and Search and Rescue
CPT	Continuous Proficiency Training
CR	Clerical and Regulatory Group
CSPS	Canada School of Public Service
DC	Deputy Commissioner
DF	Direction Finding
DFO	Fisheries and Oceans Canada
DG	Director General
DGPS	Differential Global Positioning System
DND	Department of National Defence
DOT	Department of Transport
DSC	Digital Selective Calling
EAP	Economic Action Plan
EC	Environment Canada
ED	Executive Director
EE	Employment Equity
EE AP	Employment Equity Action Plan
EEMAP	Employment Equity Management Action Plan
EFM	Ecosystems and Fisheries Management
EG	Engineering and Scientific Support Group
EL	Electronics Technologists
EN	Engineering Group
EPA	Effective Project Approval
EPDP	Engineering Professional Development Program
ER	Environmental Response
EX	Executive Group
FAIS	Fleet Activity Information System
FAM	Fisheries and Aquaculture Management
FERP	Federal Emergency Response Plan
FFS	Flight Following System
FMO	Federal Monitoring Officer
FOR	Fleet Operational Readiness
FRC	Fast Rescue Craft
FRP	Fleet Renewal Plan
FTE	Full-Time Equivalent
GL	General Labour and Trades Group
GMDSS	Global Marine Distress and Safety System
GT	General Technical Group
HF	High Frequency
HR	Human Resources

HRCS	Human Resources and Corporate Services
HSE	Health, Safety and Environmental
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
IAMSAR	International Aeronautical and Maritime SAR
IBEW	International Brotherhood of Electrical Workers
IBMS	Integrated Business Management Services
IIP	Integrated Investment Plan
IISPA	Ice Information Services Partnership Agreement
ILP	Individual Learning Plan
IMO	International Maritime Organization
IMPC	Interdepartmental Marine Pollution Committee
INNAV	Information System on Marine Navigation
IRB	Inshore Rescue Boat
ITS	Integrated Technical Services
JRCC	Joint Rescue Coordination Centre
LCAMS	Lifecycle Asset Management Services
LCM	Lifecycle Management
LCMS	Lifecycle Management System
LED	Light-Emitting Diode
LI	Lightkeepers Group
LMAC	Local Marine Advisory Council
LNG	Liquefied Natural Gas
LO	Liaison Officer
LOS	Levels of Service
LRIT	Long Range Identification and Tracking
MAF	Management Accountability Framework
MAR	Maritimes
MB	Management Board
MCP	Major Crown Projects
MCPD	Major Crown Projects Directorate
MCTS	Marine Communication and Traffic Services
MCTSO	Marine Communication and Traffic Services Officer
MELDEV	Marine Electronics Development
MERP	Marine Event Response Protocol
MIRIT	Monitoring and Identification of Risks Integrated Tool
MLB	Motor Lifeboats
MMET	Marine Maintenance and Equipment Training
MOHS	Marine Occupational Safety and Health Regulations
MOTR	Marine Operations Threat Response
MOU	Memorandum of Understanding
MRRS	Management Resources and Results Structure
MRSC	Marine Rescue Sub-Centre
MS	Maritime Services
MSET	Marine Security Enforcement Team
MSOC	Marine Security Operations Centre
MSPV	Mid-Shore Patrol Vessels
NACGF	North Atlantic Coast Guard Forum
NAFO	Northwest Atlantic Fisheries Organization
NAVAREA	Navigational Area
NCC	National Coordination Centre
NCR	National Capital Region
NL	Newfoundland and Labrador
NLFRD	National Labour Force Renewal Directorate
NMAB	National Marine Advisory Board
NORDREG	Northern Canada Vessel Traffic Services Zone Regulations
NOTMAR	Notices to Mariners
NOTSHIP	Notice to Shipping
NPCGF	North Pacific Coast Guard Forum
NRCan	Natural Resources Canada
NS	Nova Scotia
NSERC	Natural Sciences and Engineering Research Council of Canada
NSPS	National Shipbuilding Procurement Strategy
NWT	Northwest Territories
OAG	Office of the Auditor General
OFSV	Offshore Fishery Science Vessels
OGD	Other Government Department
OHS	Occupational Health and Safety
O&M	Operations and Maintenance
OOSV	Offshore Oceanographic Science Vessel
OpNet	Operational Network
OSC	On-Scene Commander
OSS	Oceans and Science Sector

OWN	Operational Women's Network
PAA	Program Activity Architecture
PAC	Pacific
PIPSC	Professional Institute of Public Service of Canada
PMF	Performance Measurement Framework
PRS	Performance Review System
PRV	Pollution Response Vessel
PSAC	Public Service Alliance of Canada
PSEA	Public Service Employment Act
PSES	Public Service Employee Survey
PWGSC	Public Works and Government Services Canada
QUE	Quebec
RAMN	Radio Aids to Marine Navigation
RAMSARD	Risk-based Analysis Maritime Search and Rescue Analysis
RCMP	Royal Canadian Mounted Police
R&D	Research and Development
RFP	Request for Proposal
RHIB	Rigid Hull Inflatable
RMAB	Regional Marine Advisory Board
RO	Radio Operations Group
ROC	Regional Operations Centre
SAC	Strategic Advisory Council
SAR	Search and Rescue
SBAR	Shore-based Asset Readiness
SC	Ships' Crew Group
SCAP	Small Craft Acquisition Plan
SCOPA	Standing Committee on Public Accounts
SCOFO	Senate Standing Committee on Fisheries and Oceans
SDS	Sustainable Development Strategy
SISAR	Système Informatisé SAR
SLA	Service Level Agreement
SLSMC	St. Lawrence Seaway Management Corporation
SMIS	Salary Management Information System
SMMS	SAR Mission Management System
SMS	Safety Management System
SO	Ships' Officer Group
SO	Standard Organization
SOA	Special Operating Agency
SOLAS	International Convention for the Safety of Life at Sea
SOP	Standard Operating Procedures
SPAC	Senior Project Advisory Committee
SPF	Strategic Program Framework
TBS	Treasury Board Secretariat
TC	Transport Canada
TEC	Total Estimated Cost
TEU	Twenty Foot Equivalent Unit
TSB	Transportation Safety Board of Canada
TSC	Technical Solution Centre
UCTE	Union of Canadian Transportation Employees
UEBO	Unam'ki Economic Benefits Office
UNCLOS	United Nations Convention on the Law of the Sea
USACE	United States Army Corps of Engineers
USCG	United States Coast Guard
VHF	Very High Frequency
VLE	Vessel Life Extension
VMM	Vessel Maintenance Management
VMMR	Vessel Maintenance Management Review
VNR	Vote Netted Revenue
VP	Vessel Procurement
VTMIS	Vessel Traffic Management Information System
VTOSS	Vessel Traffic Operator Support System
VTS	Vessel Traffic Services
WFA	Work Force Adjustment
YVR	Vancouver International Airport Authority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